# SIR GEORGE WILLIAMS COLLEGE



ANNOUNCEMENT

DAY AND EVENING DIVISIONS

1947-1948

FACULTY OF ARTS, SCIENCE AND COMMERCE

# Sir George Williams College

OF THE

YOUNG MEN'S CHRISTIAN ASSOCIATION OF MONTREAL

# FACULTY OF ARTS, SCIENCE and COMMERCE

ACADEMIC YEAR 1947-48

# INDEX

The alphabetical index at the back of this announcement will aid you in finding quickly the information in which you are particularly interested.

# HISTORICAL STATEMENT

In 1873, the formal educational work of the Montreal Young Men's Christian Association found its inception in the organization of vocational and general educational classes which later developed into the system of units known as the Y.M.C.A. Schools. In 1920, the Evening High School was inaugurated, and in 1926 the name Sir George Williams College was adopted to designate, from that time forward, the expanding formal educational programme of the Young Men's Christian Association in Montreal. (Sir George Williams was the founder of the Y.M.C.A. in London, June 6, 1844.) In 1926 also, the College was made co-educational. ● In 1928 the Association held a building campaign for \$1,500,000, part of which sum was to provide enlarged facilities for the work of the College. In 1929, the College programme was extended to include First Year of Arts, Science, Commerce and Engineering. 
In 1930 the College entered into occupation of an enlarged plant and equipment, including thirty classrooms, science laboratories, lecture rooms, assembly hall and library. • In 1931, the Junior College of Arts, Science and Commerce was organized, offering two full years of College work leading to the Diploma of Associate. In 1932, day courses were inaugurated in the Junior College, providing Pre-Professional and Associate programmes of study. In 1934, the expansion of the Junior College into the Faculty of Arts, Science and Commerce was announced. 

Members of the first graduating class were awarded the Bachelor's degree in 1936.

# TABLE OF CONTENTS

	Page
Historical Statement	2
Calendar	4, 5
Board of Governors	6
Officers of Administration	6
Officers of Instruction	7
General Statement	
Degrees, Diplomas and Certificates	
Aims of the College	
Student Guidance	
Evening Division	
Length of Courses.	
Extra-curricular Activities	16
Facilities of the College	17
Admission	19
Sir George Williams High School	20
Advanced Standing	21
Scholarships and Prizes	25
Registration	26
College Office	. 27
Fees	
Rehabilitation Benefits for Returned Men	. 30
Curricula in Arts, Science and Commerce	34
Special Programmes of Study	
Selection of Courses	45
Outlines of Subjects	. 48
Natural Sciences Division	
Humanities Division	. 62
Social Sciences Division	
Commerce Division	. 84
Index	
Announcements of the College and Schools	. Back
Application FormInside back	cover

# CALENDAR

# Academic Year 1947-48

# 1947

1947	
Monday, June 2.	Summer term begins in Evening Division.
FRIDAY, AUGUST 15.	Last day for receiving applications to write supplemental examinations.
Monday, September 1.	Labour Day. No lectures.
Monday, September 8.	Summer term final examinations begin.
	Final examinations begin for Special Veterans' course which began January 27.
WEDNESDAY, OCTOBER 1.	First term begins in Day and Evening Divisions.
Monday, October 13	Thanksgiving Day. No lectures in Day Division.
SATURDAY, OCTOBER 11.	Founder's Day.
Tuesday, November 11.	Remembrance Day.
Friday, December 19.	Last day of classes before Christmas vacation, Day and Evening Divisions.

# CALENDAR

# Academic Year 1947-48

# 1948

Monday, January 5.	Classes re-open in Day and Evening Divisions after Christmas vacation.
Monday, January 12.	First term examinations begin in Day Division.
Monday, January 19.	First term examinations begin in Evening Division.
Thursday, January 22.	Second Term begins in Day Division.
Monday, January 26.	Second term begins in Evening Division.
Friday, March 26.	Good Friday. No lectures.
SATURDAY, MARCH 27.	No lectures.
Sunday, March 28.	Easter Day.
Monday, March 29.	Easter Monday.
SATURDAY, APRIL 17.	Last day of classes in Day Division.
THURSDAY, APRIL 22.	Final examinations begin in Day Division.
Monday, May 3.	Final examinations begin in Evening Division.
Monday, May 24.	Empire Day.
FRIDAY, JUNE 4.	Graduation.

# **BOARD OF GOVERNORS**

B. W. Roberts, O.B.E., Chairman Howard I. Ross, O.B.E., M.A., C.A., Vice-Chairman

Walter G. Attridge, Esq.
W. Taylor-Bailey, B.Sc.
D. A. Bates, M.A.
J. W. Beaton, O.B.E.
H. C. Beatty, Esq.
W. T. A. Bell, B.A.Sc.
G. W. Birks, O.B.E.
Roy L. Campbell, B.A., B.Sc.F.,
F.C.I.S.
W. E. Clarke, Esq.
John B. Frosst, Ph. G.
L. C. Haskell, B.A., F.C.I.S.
George Hodge, O.B.E.
Lt. Col. S. C. Holland
R. C. Holbrook, B.Sc.

Rt. Rev. T. W. Jones, B.A., D.D.
S. Olaf Meyer, B.Sc. (Com). D.F.C.
D. P. Mowry, D.D.S.
K. E. Norris, M.A., Ph.D.
K. R. Patrick, O.B.E., M.I.R.E., S.P.E.E.
C. W. Taylor, B.Sc.
E. E. Wallace, Esq.
Lindsay, T. Webster, B. Com., C.A.
L. Austin Wright, B.A.Sc., D. Eng.

Advisory Member Adam Walker, B.Sc.

# MEMBERS OF THE FACULTY COUNCIL

J. W. Bridges, M.A., Ph.D. Douglass Burns Clarke, M.A. Henry F. Hall, B.A., L.R.E. Kenneth E. Norris, M.A., Ph.D. P. T. R. Pugsley, C.A. G. O. Rothney, M.A., Ph.D. M. R. Smith, M.A. Ernest Stabler, M.A. Claude W. Thompson, M.A. Paul Villard, M.A., D.D., M.D.

# OFFICERS OF ADMINISTRATION

Kenneth Everette Norris, M.A., Ph.D.

Principal

Henry Foss Hall, B.A., L.R.E.

Dean

Ernest Stabler, M.A.

Assistant Dean

Douglass Burns Clarke, M.A.

Registrar

Henry George Worrell, B.A.

Bursar

Arthur Hardisty McFarlane, M.A. Student Counsellor

# OFFICERS OF INSTRUCTION

(a) Natural Sciences Division (full-time)

Abraham Brodsky, B.Sc., (S.G.W.C.), Lecturer in Mathematics and Physics

Agnes Grundy, B.Sc. (McGill), Lecturer in Biology

Henry Foss Hall, B.A. (Eastern), L.R.E. (M.D.T.C.),

Dean of the Faculty and Acting Senior Professor in the Natural

Sciences Division

Samuel Madras, B.Sc., (S.G.W.C.), Assistant Professor of Chemistry

Maurice Morton, B.Sc., Ph.D. (McGill), Associate Professor of Chemistry

Maurice Raymond Smith, M.A. (Edin.),
Associate Professor of Mathematics and Thysics

(b) Natural Sciences Division (part-time)

William St. Clair Bauld, M.Sc. (Dal.),

Lecturer in Chemistry

Harry Reid Cox, F.G.A., Lecturer in Gemmology

Ernest William Vaughn Deathe, B.A. (Dal.), Lecturer in Mathematics

John Dixon, B.Sc. (McGill), Lecturer in Chemistry

Alan Robert Ralph Finlayson, B.Sc. (S.G.W.C.), Lecturer in Physics

Anne Philethea Graham, M.Sc. (McGill), Lecturer in Biology

John Boyd Graham, Lecturer in Textiles

Arthur Munroe Henry, B.A. (London), M.A. (McGill), Lecturer in Physics

James Murray Honeyman, B.A. (McGill), A.M. (Harvard), Lecturer in Biology

William Lindsay Hutchison, Instructor in Draughting

John Warwick Knowles, B.A. (Toronto), Instructor in Physics John Theodore Macfarlane, B.A. (McMaster), Lecturer in Physics and Mathematics

Edward Russell Paterson, B.A. (McGill), Lecturer in Natural Science

Donald L. Peets, B.Sc. (McGill), Lecturer in Biology

Fernand Emile Norbert Rossaert, Lecturer in Draughting

Louis Jack Sheps, B.Sc. (U. of Man.), Ph.D. (McGill), F.C.I.C., Lecturer in Textiles

Baxter Garfield Spracklin, B.A., B.Sc. (Acadia),
Assistant Professor of Chemistry

Raymond Donald Stiles, B.Sc. (N.S.T.C.), P. Eng., Lecturer in Physics

Edward Storr, B.A., Lecturer in Mathematics

Allison Dewar Turnbull, B.Sc. (N.S.T.C.), P. Eng., Lecturer in Physics

Alan Douglas Watson, B.Sc. (S.G.W.C.), Lecturer in Natural Science

Joseph Philip Zweig, B.Sc., B.Sc. (Com.), (S.G.W.C.), Lecturer in Mathematics.

# (c) Social Sciences Division (full-time)

James Winfred Bridges, B.A. (McGill), M.A., Ph.D. (Harvard),
Professor of Psychology and Senior Professor in the Social
Sciences Division

Arthur Lermer, M.A. (Toronto),
Associate Professor in Economics

Harold H. Potter, B.A. (S.G.W.C.), Lecturer in Sociology

Herbert Furlong Quinn, B.A. (S.G.W.C.), M.A. (McGill),
Assistant Professor of Social Science and Political Science

Gordon Oliver Rothney, B.A. (Bishop's), M.A., Ph.D. (London), Associate Professor of History

Ernest Stabler, B.A. (Queen's), M.A. (McGill),
Assistant Dean and Lecturer in Education

# (d) Social Sciences Division (part-time)

Clifford Henry Cheasley, M.A. (McGill), Lecturer in Economics Robert Alexander Fraser, B.A. (S.G.W.C.),

Assistant to the Registrar and Lecturer in Political Science

Sidney George Garland, M.A. (McGill), Lecturer in Sociology

Ernest Guter, M.A. (McGill), Lecturer in Economics

Gerald Maurice Mahoney, B.Sc. (S.G.W.C.), M.Sc. (McGill), Lecturer in Psychology

Heber Roy Matthews, M.A. (Mt. A.), Lecturer in Education

David Schwartz, B.A. (Queen's), B.C.L. (McGill), LL.M. (Harvard),

Lecturer in Political Science

Jacob Tuckman, B.S.S. (C.C.N.Y.), M.A. (Col.), Ph.D. (Col.), Lecturer in Psychology

John C. Weldon, B.A. (McGill), Lecturer in Economics.

# (e) Humanities Division (full-time)

Douglass Burns Clarke, B.A. (S.G.W.C.), M.A. (McGill), Registrar and Associate Professor of English and Fine Arts

Neil Marriott Compton, B.A. (McGill), Lecturer in English

Winifred Petersen Francis, B.A. (S.G.W.C.),
Assistant Professor of English

Elizabeth Hillman, B.A. (Tor.), M.A. (Bryn Mawr), Lecturer in English

Claude Willett Thompson, M.A. (Oxon.),

Professor of English and Senior Professor in the Humanities
Division

Paul Villard, M.A., D.D., M.D., Chevalier de la Legion d'Honneur, Professor of French

Rachel Wasserman, M.A. (McGill), M.A. (Rad.), Ph.D. (Cornell),

Assistant Professor of English

# (f) Humanities Division (part-time)

Thelma Sanford Allen, A.T.C.M., Lecturer in Fine Arts

Angus Bernard, M.A. (Mt. Allison), Instructor in English William Henry Chodat, Lecturer in French

Rolf Freidrich Flore, (Munster), Assistant Professor of German

William Ross Fraser, B.A. (Mt. Allison), M.A. (Dal.), B.D. (U.T.C.),

Assistant Professor of Philosophy

Barbara Gordon, A.B. (Tor.), Instructor in English

Cecily Mary Greer, B.A. (McGill), M.A. (Smith), Instructor in English

Margaret Hartledge, Lecturer in French

Miriam Ramsay Holland, Lecturer in Fine Arts

Eleanor J. Laing, B.A. (McGill), Instructor in English

Charles Lasdin, B.Sc. (Com.), (S.G.W.C.), Lecturer in Russian

Frank Roberts Lawler, B.A. (McGill), Lecturer in French

Gerald Eric LeDain, B.A., Instructor in English

Mary Gladys Logan, B.A. (McGill), Instructor in English

Norman St. Clair Manson, B.A. (S.G.W.C.), Lecturer in English

James McCorkindale, (Graduate, Glasgow School of Art), Lecturer in Fine Arts

John Parker, B.A. (McGill), Instructor in English

Mary Priscilla Ramsey, Lecturer in Spanish

Elizabeth M. Smith, B.A. (U. of B.C.), Instructor in English

Wilfred Watson Werry, B.Com., M.A. (McGill), C.A., Lecturer in English

Orson Wheeler, B.A. (Bishop's), A.R.C.A., S.S.C., Lecturer in Fine Arts

Patricia Wilmot, Instructor in English

Henry Hewitt Worsfold, B.A. (Cantab.), M.A. (McGill), Assistant Professor of Classics

(g) Commerce Division (part-time)

John Bruno Archer, B.A., B.Sc. (Com.), (S.G.W.C.), F.C.B.A., Lecturer in Commerce

John Beagley Atkinson, C.A. Lecturer in Accountancy

George T. Berthon,
Lecturer in Commerce

Alec Bloom, B.Sc. (Com.), (S.G.W.C.), Lecturer in Mathematics

George William Cunningham Carphin, B.Sc. (Com.), B.Sc. (S.G.W.C.),

Lecturer in Mathematics

Hector Waterman Chandler, B.Sc. (Com.), (S.G.W.C.), Lecturer in Commerce

John Crawford, Lecturer in Commerce

Dorothy Francis Dyer, P.C.T., Lecturer in Commerce

Harold R. Filiatrault,

Lecturer in Commerce

James Gilchrist Finnie, B.Sc. (Com.) (S.G.W.C.), C.G.A., P.C.T., Lecturer in Accountancy

William Maxwell Ford, B.A., B.C.L. (McGill), Lecturer in Commerce

Robert Preston Harrison, B.Com. (McGill), C.A. Lecturer in Accountancy

David Henry Holland, B.A. (Mt. Allison), LL.B. (Dal.), Lecturer in Commerce

Frank Kelland, B.Com., M.A. (McGill), Lecturer in Commerce

Ralph Dale Linton, B.Com. (McGill), L.I.A., C.A., Lecturer in Commerce

Alexander MacLean, A.C.I.S., Lecturer in Commerce Alexander Kenneth MacRae, C.A., Lecturer in Accountancy

T. James Metayer, E.M., Lecturer in Commerce

Russell Roy Merifield, B.A., B.C.L. (McGill), Lecturer in Commerce

Joan Phyllis Morrison, Lecturer in Commerce

Philip Thomas Renouf Pugsley, C.A. Assistant Professor of Commerce

Robert Rowan, Lecturer in Commerce

Robert Arnold Russell, B.Com. (McGill), C.A., Lecturer in Accountancy

John J. Sarrasin, Lecturer in Commerce

Hugh Baldwin Savage, B.Com. (McGill), C.A. Lecturer in Accountancy

John Watterson Tait, Lecturer in Accountancy

Merton Stafford Threlfall, Lecturer in Commerce

Arthur Westbury, Lecturer in Commerce

George Wallace Wilson, F.A.S., F.A.I.A. Lecturer in Commerce

#### Librarians

Margaret Florence Broadhurst, B.A. (Queen's), B.L.S. (McGill), Librarian

Margery Milne, B.A., B.L.S. (McGill),
Assistant Librarian

Blanche Wilson,
Assistant Librarian

#### General Statement

Sir George Williams College is directed by a Board of Governors whose authority is vested in it by the Metropolitan Board of Directors of the Young Men's Christian Association of Montreal. Its charter consists in the Act of Incorporation of the Young Men's Christian Association of Montreal, passed by the Legislature of the Province of Quebec, June, 1888.

The purpose of the College is to provide general and pre-professional education for young men and women. While general college education is the aim of the programmes of study, provision is made for specialization in certain subject matter fields.

The three curricula, in Arts, in Science, and in Commerce, are outlined in detail in later pages of this Announcement.

# Degrees, Diplomas and Certificates

DEGREES OF BACHELOR. The degrees of Bachelor of Arts, Bachelor of Science and Bachelor of Science (Commerce) are awarded upon successful completion of four-year courses of study in the Day Division of the College (Faculty of Arts, Science and Commerce), or the equivalent in the Evening Division.

DIPLOMAS OF ASSOCIATE. For students who plan to spend less time in study beyond high school graduation than is required for a Bachelor's degree the College offers three two-year programmes (three-years in the Evening Division) leading to the diplomas of Associate in Arts, Associate in Science and Associate in Commerce. Work done in fulfilment of the requirements for the Associate's diploma is applicable, of course, for credit toward a degree.

DIPLOMA IN ASSOCIATION SCIENCE. This diploma is awarded to students training for the Y.M.C.A. secretaryship, for professional training taken concurrently with studies for the Bachelor's degree.

CERTIFICATE OF CREDIT. Students taking partial programmes, i.e., those who are following one or more subjects but are not proceeding to a degree or diploma, are awarded a Certificate of Credit in each subject upon completing the required work and passing the required examination, upon request to the Registrar.

#### Enrollment

The total enrollment of Sir George Williams College and the Sir George Williams Schools during the academic year 1946-47 was 6,843 individual students. Of these 2,821 were in the College (Faculty of Arts, Science and Commerce), day and evening divisions.

# Men and Women Students

The College is co-educational, women being admitted to all courses on the same basis as are men.

# The Aims of the College

The fundamental educational philosophy of Sir George Williams College is that its chief concern shall be the development of persons, through the medium of formal education and its correlated activities. It is recognized that this is not accomplished by mere rote learning. While the subject matter of the curriculum is divided into "courses" for the sake of convenience in administration, the primary aim of the College is that students shall grow in character and personality as well as in those techniques and appreciations which may be required in full and satisfactory living. The units which go to make up such growth may be conveniently classified as attitudes, abilities and skills. It is the development of these that the College endeavours to foster in its students.

This principle is not in the least opposed to good scholarship. On the contrary, scholarship can be sound only when it is vital, when it is a living process. For example, attitudes, or ways of feeling toward individuals, institutions and other elements of one's environment, are as much a part of a person's growth as is the attainment of information, important though this may be.

Because of varying interests, aptitudes and vocational aims, a modern educational institution must provide a wide range of educational experiences for its students. In the College these experiences. traditionally called the "curriculum", are divided into three broad areas of life, viz.: (a) the nature of the world in which we live (the Natural Sciences), (b) the nature of man and of the society of which he is a part (the Social Sciences), and (c) the cultural heritage of thought, language and the arts which, though it reaches back to the dawn of history, is being continuously remade in our day (the Humanities). Believing that educated people should come into intimate contact with all of these areas of life, it is provided that the academic experience of every student should include work in each of these major fields. One attempt to accomplish this is the provision of the three exploratory "pandemic" courses. The emphasis placed upon the study of contemporary English literature and of modern writings in the fields of science, social science and the arts is another indication of this point of view. A fourth division of the College curriculum (Commerce), while distinctly practical and vocational in emphasis, is related in teaching and course content to the basic philosophy of the College, since that philosophy is based on the belief that there is no genuine conflict between the learning of skills and the development of persons, that if sound personal attitudes are tobe developed they may be as readily developed in so-called "vocational" courses as in those that are more traditionally academic in nature. Students following the Commerce Curriculum are required to take a large part of their work in the other three major fields.

The members of the staff of Sir George Williams College are wholly devoted to the teaching and guidance of students. Contacts between faculty members and students are by no means confined to the classroom and, while students are encouraged to do independent and constructive work, staff members are always available for consultation.

#### Student Guidance

Education being considered the process of stimulating and guiding the growth of individual students, all of the incidentals of education—instructors, courses of study, textbooks, examinations—are considered valuable only in so far as they serve these ends.

In addition to the fact that this concept permeates its academic work, the College has for many years maintained a programme of educational, vocational and personal guidance for its students. Several members of the College staff are trained and experienced in the techniques of personnel work. The orientation of the student to college work, the selection of suitable courses of study, the giving of assistance in the choice of a vocation, all in the light of discovered aptitudes, abilities, interests and other characteristics of his personality, are among the problems dealt with in the personnel work of the College.

A special reference library on vocational information provides the student with comprehensive and up-to-date information on a wide variety of professional and non-professional vocations.

While all instructors and members of the administrative staff of the college are responsible for student guidance as a part of their duties, and while several of these members possess a background of experience in the techniques of such work, a trained psychologist, acting in the capacity of full-time Student Counsellor, is primarily responsible for the co-ordination and development of the student guidance programme.

Students and their parents are urged to take full advantage of this service.

# **Evening Division**

For employed young men and women who for financial or other reasons are unable to attend college by day the Evening Division of the College offers the same programmes and courses of study as are available in the Day Division.

The outlines of the various courses of study, on pages 49 to 89 of this Announcement, apply to both Day and Evening Divisions. The

standard of achievement demanded of the students in the Evening Division is strictly that of the Day Division, the subject matter is the same and equal academic credit is allowed.

Partial course students also are enrolled in the Evening Division. These include all those who wish to enroll for single subjects at the college level without necessarily working toward a diploma or degree.

# Length of Courses

DAY DIVISION. The time ordinarily required to complete the work required for a degree in the College is four years. During this time twenty-one full courses must be completed, as indicated on pages 34 and 35 where curricula are discussed. Provided a proper sequence of courses is followed the student may upon the completion of two years, or eleven full courses, be awarded the Diploma of Associate in Arts, in Science or in Commerce, as the case may be. In certain cases arrangements may be made to complete the required number of courses for a degree or diploma over a longer period. However, the practice of taking partial courses is discouraged in the Day Division.

EVENING DIVISION. As in the Day Division the number of courses required for a degree is twenty-one and, for a diploma, eleven. The number of years required depends, in each case, upon the subjects chosen by the student and the amount of class work he is able to complete each year. In general, however, an efficient student may complete the work required for the Associate's diploma in three years and for a degree in six years. By attending classes in summer as well as winter sessions it is possible for evening division students to complete the degree course in four years and the diploma course in two years.

# **Extra-curricular Activities**

STUDENT ORGANIZATIONS. The College encourages and supports student activities and organizations in the belief that through such endeavours and associations much real education may accrue to the students concerned. A Student Council controls all activities of this nature, including athletics, study groups, social affairs, college newspaper ("The Georgian"), etc. Student societies in the day and evening division, respectively are known as the Students' Undergraduate Society and the Evening Faculty Student Society. Annual student society fees are to be found on page 27.

THE FINE ARTS. In order to enrich college life and to aid students in the experience and appreciation of beauty wherever it may be found, examples of fine painting from time to time are displayed, music appreciation hours are arranged and every available opportunity, curricular and extra-curricular, is realized by the College to further this aim.

STUDENT HEALTH PROGRAMME. An active programme of student athletics and health education is available to students in the day division, while more limited facilities are at the disposal of evening students. Participation in some phase of this health education programme is compulsory for all students in the day division.

RESPONSIBILITY OF COLLEGE FOR ACCIDENTS. While every reasonable precaution will be taken to prevent accidents, students are reminded that participation in athletics and other curricular or extra-curricular activities in the College is entirely at their own risk.

### Graduates

Association of Alumni. The Association of Alumni was organized by the first graduating class of the College in 1937 to perpetuate the fellowship established in their years at the College, to preserve an interest in education, and to work extramurally for the welfare of the College. Each College undergraduate is eligible for membership upon graduation, and becomes an active member of the Association upon payment of the membership fee of \$5.00 by April 1st of the graduation year to the Association. Fee is refundable if student postpones graduation. Sustaining membership fee, for old members, is \$3.00 annually on April 1st.

# FACILITIES OF THE COLLEGE

Sir George Williams College and the four Sir George Williams Schools occupy the second and third floors of the Drummond Street Y.M.C.A. building and adjacent annexes on Drummond and Stanley Streets. Accommodation is available for 5,000 students in the various classes of the College and the Schools.

CHEMISTRY LABORATORIES. The main laboratory (I) accommodates 40 students, and laboratory II, for advanced work, accommodates 24 students. The tables are equipped with gas, water, and individual lockers which will accommodate more than 750 students. The main laboratory is equipped with A.C. and D.C. electricity. The six fume chambers are provided with shatter-proof glass doors and high velocity exhaust fans.

PHYSICS LABORATORY. Three benches provide accommodation for 20 students and an additional 20 may be accommodated at the same time for physics experiments in the adjoining Electrical Laboratory. Equipment includes apparatus for experiments in general physics, electricity, mechanics, optics and thermodynamics.

ELECTRICAL LABORATORY. The electrical laboratory is wired for A.C. and D.C. electricity, and is provided with a complete equipment for study and experiment in magnetism, general electricity, radio, electrical communication and sound reproduction, including a long range radio receiver and short wave transmitter.

BIOLOGY LABORATORY. Housed in the Stanley St. Annex, this laboratory is equipped to accommodate 24 students. Compound microscopes and dissecting instruments are supplied for the student's individual use. The large collection of microscope slides covers the fields of botany, zoology, histology and embryology. There is adequate, modern apparatus for experimental work in physiology. Other apparatus includes microtomes, constant temperature oven, microprojector, photomicrographic equipment, and both slide and motion picture projectors. In conjunction with the laboratory there is an extensive teaching museum of charts and models, preserved and mounted specimens, and skeletal preparations.

SCIENCE LECTURE ROOM. Science demonstration and popular lectures are provided for in this room. It is equipped with tiered seating, tablet arm chairs, modern demonstration desk and appliances, complete projection equipment, including microprojector, and full sets of charts and lantern slides.

THREE ART STUDIOS. Three art studios are available for work in drawing and painting, modelling and sculpture, and all phases of fine and applied art.

CLASSROOMS. The 37 rooms of the College are in constant use day and evening. They are well lighted, and are equipped with mechanical ventilation. Three of these rooms bear names in honor of the late D. A. Budge, Esq., the late Abner Kingman and the late C. T. Williams, Esq. The Accountancy room will seat 40 students at special commercial desks.

VISUAL INSTRUCTIONAL EQUIPMENT. In keeping with modern developments in instructional methods, the College has recently greatly increased its equipment for visual instruction. This now includes not only a wide range of charts, models, maps and pictures for basic instruction in the sciences and fine arts, but also extensive projection equipment. This includes a sound motion picture projector, five projection lanterns (two of which are equipped for opaque projection), and two sets of microprojection apparatus. Appropriate sets of many hundreds of slides accompany this equipment. While especially useful in such fields as the fine arts, biology and natural science, this equipment is often used in other courses.

LIBRARY AND READING ROOM. In charge of trained librarians, the newly fitted, open-stack library is increasing its holdings rapidly to keep pace with growing demands of the curriculum and the student body. Reading rooms have accommodation for one hundred and fifty students at one time.

CHAPEL. The Captain's Chapel provides, with its modernromanesque architecture, stained glass and organ, an atmosphere conducive to quiet meditation and spiritual inspiration. GYMNASIUM AND SWIMMING POOL. The College has the use of two gymnasia, swimming pool, handball courts, and other equipment for use by the students in their health and recreation programme.

RESIDENCE. Men students may reside in the Y.M.C.A. dormitory which occupies the same building as does the College. The residences of the Montreal Y.W.C.A., both within walking distance of the College, are recommended for women students. Particulars may be obtained from the Residence Secretary, 1124 Dorchester Street, West.

# CLASSIFICATION OF STUDENTS

- (1) UNDERGRADUATES: Students who, at the time of registration, meet full admission requirements and enroll with the intention of completing the work required for a degree or diploma are classified as Undergraduates whether they be taking several subjects or only one in any given year.
- (2) Partial Course Students: Students who, at the time of registration, do not expect to proceed to a degree or diploma are classified as Partial Course Students irrespective of the number of subjects of study they may be following in any given year.

# REQUIREMENTS FOR ADMISSION TO THE COLLEGE (FACULTY OF ARTS, SCIENCE AND COMMERCE)

The college reserves the right to refuse admission even when the stated requirements for entrance have been satisfied.

- (1) Undergraduates: Admission to the College may be secured
- (a) by the presentation of satisfactory proof of graduation from high school with an average of at least 60% in not fewer than eight papers.

The College does not require any special selection of subjects in high school, but rather seeks evidence of consistent good scholarship in the subjects chosen as an indication of ability to do college work. It is expected, however, that English will have been taken by all students in their final year at High School, and Algebra, Geometry, and at least one science by students planning to enter the Science Course. Students planning to enter the Day Division must also present a satisfactory High School Principal's Report (see College application form). The College may at its discretion require certain students to take other tests. Students whose mother tongue is other than English must show, on certain tests administered by the College, that they have sufficient knowledge of the English language to be able to follow a College programme conducted in that language.

SIR GEORGE WILLIAMS COLLEGE

(b) by fulfilling the special entrance requirements for persons over 21 years of age.

Persons over 21 years of age who have not satisfied the technical requirements for high school graduation but who have the capacity to do college work are admitted as conditioned undergraduates in the College by fulfilling the Special Entrance Requirements for Persons over Twenty-one Years of Age. Details regarding these requirements may be obtained from the Registrar.

(2) Partial Course Students: In the case of students wishing to enroll for partial courses or unit subjects in the Evening Division, high school graduation is not required, except in the case of those subjects in which successful college work is absolutely dependent upon preliminary work in the same subject taken at the high school level. Certain unit courses in the College, however, are not dependent upon work completed in high school. Students wishing to register for such unit courses, as Partial Course Students, are required, therefore, only to be sufficiently mature to do the work of the course. Although the College will follow this policy of admission of Partial Students, it reserves the right, however, to ask for proof of High School Graduation in certain cases.

While partial course students and students following single courses of interest are expected and encouraged in the Evening Division of the College, only in special circumstances will the registration of partial students be accepted in the Day Division. Where necessary and desirable, however, and upon approval of the application by the Registrar, such registration may be made.

# Sir George Williams High School

Applicants for admission to the Faculty of Arts, Science and Commerce, whose entrance certificates do not quite meet the requirements, may make up the deficiency in the Evening High School.

# LIST OF EQUIVALENT CERTIFICATES

The following certificates are accepted as fulfilling the requirements for entrance to the first year of the College provided that a standing equivalent to 60% average on the Quebec High School Leaving Certificate is indicated.

#### Province of Quebec

- a. The High School Leaving Certificate (Protestant or Catholic).
- b. The Graduation diploma of Sir George Williams High School.
- c. The Junior School (or Matriculation) Certificate of the several Universities.
- d. The Graduation diplomas of certain secondary schools.

#### Other Provinces of Canada

a. Nova Scotia: The Grade XI Certificate.

b. Prince Edward Island: The Second Year Certificate, Prince of Wales College.

c. New Brunswick: Junior Matriculation or High School Leaving.

d. ONTARIO: The Middle School Certificate, or Grade XII.

e. Manitoba: The Grade XI Certificate.

f. SASKATCHEWAN: The Grade XI Certificate.

g. ALBERTA: The Grade XI Certificate.

h. British Columbia: Junior Matriculation Certificate.

#### United States

- a. The College Entrance Board Certificate.
- b. The Board of Regents Certificates, State of New York.
- c. The graduation diploma of accredited High Schools.

#### Other Certificates

Certificates other than those mentioned above may be submitted to the Registrar for examination and evaluation.

# APPLICATION FOR ADVANCED STANDING

Students who wish to apply for advanced standing upon the basis of work already completed in other colleges or universities should understand the following conditions:

- 1. Each application for advanced standing is considered individually, on its merits.
- 2. A student, who presents evidence of having completed one full year of study in a four-year college, will be admitted, as a rule, to the second year of the College. It is provided, however, that if such student's first-year selection of subjects has not coincided with the curricular requirements of the College, the deficiency must be made up in the second year.
- 3. Students presenting senior matriculation, senior high school leaving, or upper school certificates will, in general, be given credit in the first year, course for course, for subjects completed. Owing to the special requirements of the curricula of the College, which are listed below, it is not possible for a student to obtain complete first year standing through presentation of one of the above certificates. Deficiencies may be made up, however, during the remainder of the course provided they are not too great and, further, that the student does the extra work necessary.
- 4. In order to obtain a degree or diploma in the College, a candidate must do the equivalent of at least one full academic year's work (including the final year) in the College irrespective of the

22

amount of *pro tanto* credit allowed. (In the Evening Division this is interpreted to mean that a student must complete at least five full courses over a period of at least three four-month terms.) This regulation applies to students presenting certification of more than one year's work in another college or university, and also to graduates of Sir George Williams College who may wish to qualify for a second bachelor's degree in a field (Arts, Science or Commerce) other than that in which they were graduated. The College does not encourage the practice of students qualifying for several degrees at the bachelor level. In no case will the college grant all three bachelor's degrees to one student without special review of the circumstances by Faculty Council.

5. Except by special permission of the Dean no course or courses will be accepted *pro tanto* for the pandemic courses.

6. Any undergraduate of the College presenting a qualifying certificate for a commission in any branch of His Majesty's Forces will be granted one full course credit in any division (Natural Science, Social Science or Humanities). Such credit will not apply towards the five courses needed to meet the residence requirements for a second degree.

# ACADEMIC YEAR AND CLASS HOURS

The winter session of the college is divided into two terms. In the day division each term is three and one-half months in length. In the evening division each term is four months in length. Exact dates marking the opening and closing of the various terms are to be found in the calendar on page four of this announcement.

In most cases three hours of lectures are held in each course each week in the day division. In the evening division the same courses involve only two hours of lectures per week. Fewer lecture hours per week are required in the evening division than in the day division in view of the fact that the academic year is longer in the evening division and that evening students as a rule are older and more mature than day students, and the extra work, if necessary, is made up in assignments completed outside of class. Additional class hours are scheduled for laboratory work where this is included in a course.

The class hours of each course are given in the Day Division and Evening Division timetables, which should be consulted before registering.

#### Summer Session

The summer session of the college, which is operated in the evening division only, is four months in length. The session is held for the convenience of evening students and it is recommended that evening students who take advantage of this session do so primarily

to lighten the course load in the winter session. Evening students are not advised to carry a program through both winter and summer sessions, unless at a reduced course load, for two consecutive summers. Students regularly enrolled in the Day Division of the College may not take courses for credit in the summer session unless it is to make up a credit deficiency.

#### **EXAMINATIONS AND ADVANCEMENT**

All students registered in the College are required to write the regular progress examinations held in January and the final examinations held at the close of the session.

The grades awarded as the final standing in each subject for the academic year are given on the basis of:

- (1) The year's work of the student, week by week;
- (2) The progress examinations;
- (3) The final examinations.

The matter of satisfactory attendance will be given consideration in assessing the final grade for each subject.

Since June 30, 1943, course grades are awarded according to the following system:

A (90-100%), B (80-89%), C (70-79%), D (60-69%, the lowest clear passing grade), E (50-59%, a conditional pass, explained below), F (Below 50%, failure), Abs. (Absent from final examination), Inc. (A provisional category, indicating that a passing grade may be assigned when the student has completed additional required course work. Incomplete courses are finally graded not more than twelve months after the close of the session in which they were taken.

Until June 30, 1943, course grades were awarded according to the following system:

A+(95-100%), A(90-95%), A-(80-89%), B+(70-79%), B(60-69%), the lowest clear passing grade), C (50-59%, conditional pass), F (Below 50%, failure), Abs. (Absent from final examination), Inc. (Course work incomplete).

A student who has obtained satisfactory grades in all but one of his subjects, and has a "conditional pass" (E in the new grading system, C in the old) in that subject may proceed to the next year of his course without the necessity of writing a supplemental examination. However, if that subject is pre-requisite to advanced work which he expects to take the following year, he is advised to make an effort to improve his standing during the vacation and to pay special attention to that subject during the ensuing year.

A student securing "conditional passes" in two subjects in any given year must pass the supplemental examination in at least one of these subjects in order to progress as an unconditioned student.

In order to secure credit for courses in which "F" grades have been obtained, supplemental examinations in those courses must be written. A student may progress to the following year carrying one such "condition" provided it is not pre-requisite to advanced work to be taken in the higher year, and provided also that he has not already secured a "conditional pass" in one of his other subjects. This "condition" must be removed, however, within twelve months of the time of the final examination failed, or the course repeated if credit for it is to be secured.

Students securing "F" grades in three or more subjects in any given year are required to repeat those subjects, if credit for them is to be secured, and may not write supplemental examinations in those courses.

Absences from examinations and incompletes are considered a failures.

A student is considered to have failed when he receives two or more failures, one failure and two or more "conditional passes" (E's), or three or more "conditional passes" (E's).

Students are reminded that all grades of conditional pass, failure, absence, and incomplete remain permanently on his record, and are reported in all transcripts of record, although credit may be obtained at a later date by the passing of supplemental examinations, etc.

# Supplemental Examinations and Late Completions

Supplemental examinations are held during the second week of September and may also be written in the regular examination periods during the year.

Application to write the Supplemental examinations must be submitted to the Registrar on the form provided for this purpose at least one month before the examination to be written. A fee of \$2. per paper is charged for these supplemental examinations, payable at the time of application.

Without special permission of the Faculty Council, supplementary examinations may not be written later than thirteen months after end of the term in which the course was taken.

Without the special permission of the Faculty Council credit may not be secured for courses by passing examinations unless the course has been followed in the regular way during the academic year. When such permission is given a fee of \$5.00 is charged for each paper, payable at the time of application. When a student has obtained the grade of "incomplete" in any subject, this grade may be raised when the student has completed the required additional course work within a period of twelve months from the end of the course and has paid a fee of \$2.00.

#### **SCHOLARSHIPS**

Several scholarships are awarded annually in different years and divisions of the College. These are the Abner Kingman Scholarships, the D. A. Budge Memorial Scholarships, the Nathan Lande Scholarship, the Max E. Binz Scholarships, and Entrance Scholarships awarded by the Board of Governors of the College.

A detailed announcement of these various scholarships may be obtained at the College office.

#### **PRIZES**

L'Alliance Française Prizes awarded annually to students in the College obtaining high standing in advanced courses in French.

Le Prix Villard presented by the students of French in the College, 1942-43, in honour of Paul Villard, M.A., D.D., M.D., Chevalier de la Légion d'Honneur, Professor in the Humanities Division, and awarded annually "pour recompenser l'étudiant qui s'est plus intéréssé et distingué dans l'étude de la langue et de littérature françaises."

The Board of Governors Medal for Creative Expression awarded annually, when merited, by the Board of Governors of the College to the student or students giving evidence of outstanding ability in creative expression in the fine arts,—creative writing, oratory, drawing, painting, drama or music.

First Graduating Class Award. The first graduating class of the Faculty of Arts, Science and Commerce, known as the Guinea Pig Club, a name symbolic of their pioneering experience, makes a presentation, when merited, to the student who is adjudged to have made the most outstanding new contribution, either academic or extra-curricular, to the student life of the College.

Association of Alumni Award awarded annually, when merited, to the graduating student, who, in the opinion of the Faculty Council of the College, has by his activities, achievements and interest, during his term at the College, won the outstanding commendation and respect of his fellows and of the faculty.

The Mappin Medal awarded annually, when merited, by Mappin's Ltd. of Montreal to a graduating student who has done most outstanding work in the natural sciences throughout his course.

The Mary J. Tupper Prize in Religious Education awarded annually when merited, by Dr. Lester Joyce in memory of his grandmother.

#### REGISTRATION AND FEES

Enrollment must be made personally at the College offices, during the month preceding the opening of the Session (see calendar on page 4). Tuition fees are payable at the time of registration, unless permission to do otherwise is obtained from the Bursar.

All students registering in the College for the first time must present a record of previous school and college work with their application for admission. Following this application, the student's proposed course of study must be approved before the application can be accepted and registration permitted. Students will be accepted in order of registration, irrespective of the date of application.

After the opening of the term, students may change their programme of studies only upon the approval of the Dean or Registrar.

EXTRA COURSES. In the Day Division, courses in addition to the regular programme of 6 courses in first year, 5 in second year, 5 in third, and 5 in fourth, are termed "extra courses". The Faculty Council approves the principle of superior students in the Day Division taking extra subjects for the enrichment of their curricula, and of conditioned students taking extra subjects to make up deficiencies, but only under the following conditions:

- (1) No student in the Day Division will be given academic credit for more than the regular number of courses in any one school year, except to make up a deficiency.
- (2) A Day Division student without a deficiency in credit may take an extra course only if his previous record indicates his ability to do the additional work entailed. In this case no academic credit will be given for the extra course.
- (3) In no case may a student in the Day Division be permitted to take more than one extra full course in a given academic year.

# The College Office

The College Office is on the third floor of the main building. The office hours are 9:00 a.m. to 9:00 p.m. (Saturday, 1:00 p.m.).

# College Bookstore

All books and supplies required may be purchased at the College Bookstore. Students should secure a book-list from the College Office and be sure of the edition required before buying books elsewhere.

### FEES-DAY DIVISION

Tuition, per year (exclusive of other fees below)\$	185.00
Tuition, extra subjects (in addition to regular programme) each full course*	25.00
Tuition, partial course studentsFee on appli	cation
Laboratory fee, payable in addition to tuition, for each subject involving laboratory or practice periods in addition to lectures	10.00
Caution Money Deposit (made by each student and refunded, less breakages and shortages, at close of year)	5.00
Deferred Payment fee (charged when tuition is paid in two or more installments)	to 5.00
Course Change fee (for changes 10 days after opening of term)	2.00
Late Registration fee	5.00
Supplemental examinations, per paper	2.00
Students' Undergraduate Society, annual fee	10.00
Associate Diploma fee (payable on April 1st of award year)	5.00
Graduation fee (payable on April 1st of graduating year)	10.00
Removal of Incompletes	2.00
Withdrawal fee (see page 29)2.50	to 5.00
Transcript fee (for each issuance of Transcript of Record)	1.00
Studio Fee (Fine Arts 108)per month	7.00

<sup>\*</sup>A full course represents a subject studied for one full academic year of two terms A course which continues for one term only, half the academic year, is therefore a half-course.

#### FEES-EVENING DIVISION

Tuition (exclusive of other fees below):	
Each half-course*	\$ 16.50
Each full course*	33.00
Laboratory fee, payable in addition to tuition for each subject involving laboratory or practice periods in addition to lectures	10.00
Caution Money Deposit (made by each student taking laboratory work, and refunded, less breakages and shortages, at close of year)	3.00
Deferred Payment fee (charged when tuition is paid in two or more installments	to 5.00
Course Change fee (for changes 10 days after opening of term)	2.00
Late Registration fee	5.00
Supplemental examinations, per paper	2.00
Evening Faculty Student Society, annual fee (payable by all Undergraduates; optional for Partial Students)	5.00
Associate Diploma fee (payable on April 1st of award year)	5.00
Graduation fee (payable on April 1st of graduating year)	10.00
Removal of Incompletes	2.00
Withdrawal fee (see page 29)1.00	to 5.00
Transcript fee (for each issuance of Transcript of Record)	1.00
Studio Fee (Fine Arts 108)per month	7.00

# **Registration Deposit**

A registration deposit of \$5.00 must be paid by all students in the College. This deposit will be credited to their tuition contract, but is not refundable in the event of non-attendance. Registration is not considered complete in any case until the student concerned has complied with all requirements of the Registrar's Office and has paid the prescribed deposit, or has made an arrangement for the payment thereof which has been approved by the Bursar.

# **Deferred Payments**

Although it is contemplated that in most cases fees will be paid in full at the time of registration, arrangements may be made with the Bursar for deferred payments. The ability of the student to pay shall have consideration in all questions regarding deferred payments, and every reasonable effort will be made by the College to

enable the student to take advantage of the training offered. In cases of deferred payments, a fee to cover the cost of opening a ledger account on the College books will be charged, and must be paid at the time of registration along with an initial payment on tuition fees.

The College reserves the right to withhold the award of a degree, diploma or transcript of credit to any student whose fees are not paid in full.

#### Withdrawal and Refund

Students who are forced to withdraw from a course, or from the college are required to notify the Registrar's Office in writing and to give their reason for withdrawal. As the College assumes the obligation of carrying the student throughout the year when the student registers, and as the College provides the instruction and accommodation on a yearly basis, the Board of Governors has ruled as follows:

- (1) Application for withdrawal must be presented within thirty days after discontinuing attendance.
- (2) All tuition credits and refunds shall be made entirely at the pleasure of the College.
- (3) The following fees are not refundable, viz: fees for course changes; late registration; removal of Incompletes; supplemental examinations and student societies.
- (4) Credits or refunds will be granted on a pro rata basis only as follows:
  - (a) Cash refunds may be granted in cases where students are compelled to withdraw on account of serious and continued personal illness. The application must be accompanied by a certificate from a physician, satisfactory to the College.
  - (b) In case a student who is regularly employed during the day is sent out of the city permanently by his employer or compelled to change his working hours so as to prevent his continuing at the College, a refund may be granted, provided the application is accompanied by a statement from the firm, satisfactory to the College.
- (5) Tuition not refunded or used may, upon securing a certificate of credit from the Bursar, be applied upon subsequent courses pursued in the College, providing such courses are taken within two years of the date of withdrawal of the student.
- (6) In the event of a student's withdrawal from the College, he is charged pro rata for sessions held up to the date of notification of withdrawal, plus a withdrawal fee depending upon the total tuition value of the course and the date of withdrawal.

<sup>\*</sup>A full course represents a subject studied for one full academic year of two terms. A course which continues for one term only, half the academic year, is therefore a half-course.

# REHABILITATION BENEFITS FOR DISCHARGED MEN AND WOMEN

# Summary of Training Provisions of the Post-Discharge Re-Establishment Order, P.C. 5210

**Department of Veterans Affairs** 

University Training

# I. UNDER-GRADUATE—(Para. 8, P.C. 5210)

The Minister has authority to approve training, including maintenance grant and fees—together with appropriate allowances for dependents—for any discharged person who has the aptitude and inclination and who:

- a. has been regularly admitted to a university before his discharge and resumes within one year and three months after discharge a course, academic or professional, interrupted by his service, or
- b. becomes regularly admitted to a university and commences any such course within one year and three months after his discharge, or
- c. because of ill health or because his admission to the university has been conditional upon his fulfilling some additional matriculation requirements or for any other good reason shown to the satisfaction of the Department, delays resumption or commencement of such course beyond the aforementioned periods.

The period of assistance in university training is governed by the length of service. Where progress is satisfactory the assistance may be continued for as many months, in university, as the man served in the Forces. If the student's progress and attainments in his course are such that the Department deems it in his interest and in the public interest, the payment of the grant may be extended beyond the period of service to permit the man to complete his course.

(In no case shall a grant hereunder be continued to a discharged person who, having failed in one or more classes or subjects in any academic year, fails in more than one of the supplementary examinations next offered by the university in any such classes or subjects—P.C. 7224).

NOTE: "Attainments" means unconditioned standing in the top 25% (first quartile) of his class on the final examinations on the full work of the year next preceding the year in which his period of entitlement expires.

# II. Post-Graduate—(Para. 9, P.C. 5210)

In case any discharged person:

- a. has entered upon a post-graduate course, either academic or professional, in a university before enlistment, or was about to do so at the time of his enlistment, or, having completed his undergraduate course in a university after his discharge, enters upon a post-graduate course as aforesaid, and
- b. resumes or commences such post-graduate course within
  - i. one year from his discharge, or
  - ii. one year from the commencement, next following his discharge, of such course in such university, if his discharge precedes each commencement by not more than three months, or
  - iii. in the case of a discharged person who completes his undergraduate course after his discharge, as soon as may be after such completion.

if the Department, having considered such person's attainments and his course, deems it in the public interest that he should continue such course, the Department may, subject to the provisions of this Order, authorize the payment to such person of a maintenance grant and fees for as many months as he served. The assistance may be extended if the progress and achievements are so outstanding that it is in the public interest that the grant should be continued.

A candidate with a first degree, B.A., B.Sc., M.D., D.D.S., etc., who applies for further training, academic or professional, in his special field, shall be considered under Paragraph 9, Postgraduate Training.

Where a first degree is required for admission to a professional training school, or faculty, a candidate for such professional training shall be considered under Paragraph 8, Undergraduate Training.

Vocational, Technical, or other Educational Training—(Para. 6, P.C. 5210)

The Department has authority to approve training, including maintenance grant and fees—together with appropriate allowances for dependents—to any discharged person, provided he has the aptitude and inclination, where such person is pursuing vocational, technical or other educational training; where the Department approves such training as being training which will fit him or keep him fit for employment or re-employment or will enable him to obtain better or more suitable employment; and where he makes progress in such training to the satisfaction of the Department.

'Other Educational Training' provides for:-

- (1) Resumption of education leading to high school graduation or matriculation, where such training is pre-requisite to employment or professional training.
- (2) 'Refresher' or 'brush-up' courses in the professions.

Note: The period of training is governed by the length of service. For most types of training the maximum will be twelve months. In instances where the required training exceeds twelve months grants may be continued for a period not exceeding the length of service. In no case shall grants be paid beyond the period of service except in the case of disability pensioner.

#### Maintenance Grants

Where the discharged non-pensioner is in full-time training, the basic maintenance grant for a single person is \$60.00 per month; married person \$80.00 per month, subject to reduction by such amount on account of any wages, salary or other income such person may have received or be entitled to receive in respect of the period for which such grant is paid, as to the Department seems right. Appropriate allowances may be paid on behalf of dependents.

# THE DIVISIONS OF THE FACULTY OF ARTS, SCIENCE AND COMMERCE

The various courses of study offered in the Faculty of Arts, Science and Commerce are grouped in four Divisions: The Natural Sciences Division, the Humanities Division, the Social Sciences Division, the Commerce Division.

The subjects of study included in each of these Divisions of the Faculty are as follows:

THE NATURAL SCIENCES DIVISION (Pages 49 to 61):

Biology

Chemistry

Draughting

Mathematics

**Physics** 

**Textiles** 

THE HUMANITIES DIVISION (Pages 62 to 73)

English Language and Literature

Fine Arts

French Language and Literature

German

Greek

Italian

Philosophy

Russian

Spanish

THE SOCIAL SCIENCES DIVISION (Pages 73 to 83):

Economics

Education

History

Mathematics

Political Science

Psychology

Sociology

THE COMMERCE DIVISION (Pages 84 to 90):

Accountancy

Commerce

**Executive Training** 

Mathematics

While all students will follow some courses in each of the first three Divisions, students who pursue the curriculum in Arts will find that a majority of their courses are in the Humanities Division or the Social Sciences Division, Science students will elect most of their courses from the Natural Sciences Division, and Commerce students from the Commerce Division.

# CURRICULA

Each year's work of a student must be approved by the Dean before it is considered valid for academic credit.

# CURRICULUM FOR THE DEGREE OF BACHELOR OF ARTS

Candidates for the degree of Bachelor of Arts are required to complete twenty-one full courses\* (in the Day Division: six in the first year and five in each of the last three years; in the Evening Division: any suitable number each year) in accordance with the following plan:

- a. Four full courses in English. Of these English 101 and 116 must be taken during the first year. (French 104, French-Canadian Literature, may be substituted for a half course in English by those qualified to take it.)
- b. Three pandemic courses: Natural Science 101 and Social Science 101 in the first two years, and Humanities 101 in the third year.
- c. In the Natural Sciences Division, at least two additional full courses but not more than five.
- d. In the Social Sciences Division, at least three additional full courses.
- e. In the Humanities, Social Sciences and Commerce Divisions the remainder of the twenty-one courses. However, not more than three full Commerce courses may be taken for this degree. One course in Mathematics may be counted as a credit in the Humanities Division.
- f. Students will attend seminars as arranged in the guidance programme of the College and will participate in the health programmes provided.

# CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE

Candidates for the degree of Bachelor of Science are required to complete twenty-one full courses\* (in the Day Division: six in the first year and five in each of the last three years; in the Evening Division: any suitable number each year) in accordance with the following plan:

a. At least three full courses in English. English 101 in the first year, and two other approved courses.

- b. Three pandemic courses: Natural Science 101 and Social Science 101 in the first two years, and Humanities 101 in the third year.
- c. At least Chemistry 101 or 102, but not both; Physics 101; Biology 101 and two other laboratory courses in one of the following fields—Chemistry, Physics, or Biology.
- d. At least one and one-half courses in Mathematics (exclusive of Mathematics 100 and 102).
- e. At least two but not more than five additional full courses in the Humanities, Social Sciences and Commerce Divisions.
- f. The remainder of the twenty-one courses from the Natural Sciences division.
- g. Students will attend seminars as arranged in the guidance programme of the College and will participate in the health programmes provided.

# CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE (COMMERCE)

Candidates for the degree of Bachelor of Science (Commerce) are required to complete twenty-one full courses\* (in the Day Division: six in the first year and five in each of the last three years; in the Evening Division: any suitable number each year) according to the following plan.

- a. At least three full courses in English. English 101 in the first year, and two other approved courses.
- b. In Mathematics, at least Mathematics 102 and 103.
- c. In Accountancy, at least Accountancy 101 and 102.
- d. In the combined fields of Economics and Political Science, at least three full courses.
- e. Three pandemic courses: Natural Science 101 and Social Science 101 in the first two years, and Humanities 101 in the third year.
- f. Commerce 105 and at least two additional full Commerce courses.
- g. The remainder of twenty-one courses to be selected.
- h. Students will attend seminars as arranged in the guidance programme of the College and will participate in the health programmes provided.

A full course represents three hours of class work per week for a full academic year, with the required additional laboratory or studio work. A three-hour course followed for one term only is therefore a half-course.

<sup>•</sup> A full course represents three hours of class work per week for a full academic year, with the required additional laboratory or studio work. A three-hour course followed for one term only is therefore a half-course.

# MAJORS IN THE CURRICULA FOR ARTS AND SCIENCE DEGREES

Majoring has been approved in the fields of Arts and Science in the following subjects: Chemistry, Mathematics, Physics and Mathematics, Biology, English, Fine Arts, History, Economics, Economics and Political Science, Sociology, and Psychology.

A "major" is an approved sequence of at least six full courses in one of the above subject matter fields, which may include certain approved courses in other closely related fields. In English ten courses (six courses beyond the four required for all Arts students) constitutes a major.

Further information regarding majors may be found under the outlines of the specific subject matter fields listed in the following pages of the announcement.

Any student wishing to major must consult the Dean or the Senior instructor of the subject matter field involved for approval before planning his course sequence, and present to the registrar a statement signed by the appropriate instructor, authorizing him to register for studies in the field of major.

# REQUIREMENTS FOR MAJORS

# Major in Biology

The following courses, in an approved sequence, constitute a major in Biology:

Biology 101 and four additional full courses in Biology; and Chemistry 105 and 108; and Mathematics 103.

Depending on the ultimate aims of the student certain other courses may be desirable. Under certain conditions Chemistry 112 may be counted as one of the necessary courses in Biology. No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in Biology.

# Major in Chemistry

The following courses in an approved sequence, after completion of Chemistry 101 or 102 or the equivalent, constitute a major in Chemistry:—

Chemistry 103, 104, 105 and 108.

Any two of Chemistry 109, 106-115, 112, 113.

Mathematics 105 or 111, Physics 105.

The following sequence is suggested:

Second year—Chemistry 103, 105, Mathematics 105 or 111.

Third year—Chemistry 104, 106, 108, 115, Physics 105.

Fourth year—Any additional required courses in Chemistry not already taken.

*Note:* Because of the alternation of Chemistry 106, 112, 113 and 115, it may be necessary for the student to take one of these courses in his third year.

# Major in Economics

The following courses in an approved sequence constitute a major in Economics:

Economics 101, 102, 106, 108, 109, 111; and two other full courses in Economics; Mathematics 103 may be taken as part of an Economics major.

No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in Economics.

# Major in Economics and Political Science

The following courses in an approved sequence constitute a major in Economics and Political Science: Economics 101, 102, 109; and one other full course in Economics; and Political Science 101, 102 and one more full course in Political Science; and History 107, or English 104.

No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in Economics and Political Science.

# Major in English

The following courses in an approved sequence constitute a major in English: English 101, 116, 111, 103, 109, and 120; and Five and one-half additional courses in English not including English, 100, 104, 105, 119, 121 or 122. With the approval of the senior instructor in English a student may substitute Philosophy 102, Fine Arts 104, or French 104 for one of these additional five and one-half courses.

No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in English.

# Major in Fine Arts

The following courses in an approved sequence constitute a major in Fine Arts:

Three full years of studio work in Fine Arts 103 or 108; and Fine Arts 102 and 106; and two other full courses in the Fine Arts or approved related fields.

The following subjects may, with the approval of the senior instructor in the Fine Arts, be included in a Fine Arts major: English 112, English 127, Sociology 104, Sociology 109.

No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in Fine Arts.

# Major in History

The following courses in an approved sequence constitute a major in History:

History 101, 103 and 104; and three other full courses in History or approved related fields. One and a half credits from the following subjects may, with the approval of the senior instructor in History, be included in a History major:

Sociology 104, 109, English 104, Political Science 102, Economics 102, 109.

No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in History.

# Major in Mathematics

The following courses in an approved sequence constitute a major in Mathematics:

In the first year-Mathematics 101 or 101A.

In the second year—Mathematics 104 and 105.

In the third year-Mathematics 106, 107, 108 and Physics 104.

In the fourth year—Mathematics 109 (may be taken in the third year if desired).

No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in Mathematics.

# Major in Mathematics and Physics

The following courses in an approved sequence constitute a Major in Mathematics and Physics:

Mathematics 101 or 101A, 104, 105, 107, 108, 109; and Physics 101 and 102, 104, 105, 106, 107 and either Physics 103 or 109.

No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in Mathematics and Physics.

# Major in Psychology

The following courses in an approved sequence constitute a major in Physchology: Psychology 101, 102 and four more full courses in Psychology. One of the following courses may, with the approval of the senior instructor in Psychology, be included in a Psychology major:

A course in Biology, a course in Sociology, Philosophy 101 or 102, Education 101, or Mathetics 103.

No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in Psychology.

# Major in Sociology

The following courses in an approved sequence constitute a major in Sociology: Sociology 102 and three other full courses in Sociology; and Psychology 106; and three of Psychology 108, 107, Economics 102, 107.

No student will be accepted for the major until a plan of study over the several undergraduate years has been approved by the senior instructor in Sociology.

Note: A full course in any field is to be considered as either a course carrying one full credit, or two courses carrying half credit.

# CURRICULA FOR THE DIPLOMA OF ASSOCIATE

At the conclusion of two years' work in the Day Division, or the equivalent in the Evening Division, a student may be awarded the diploma of Associate in Arts, Associate in Science or Associate in Commerce. In order to be awarded this diploma the completion of eleven full courses\* is required, the selection to be made not only in compliance with the curricula below but with a view to realizing the maximum values in the two years of college work. Work done in fulfillment of the requirements for the Associate diploma is, of course, applicable toward a degree.

# Curriculum for the Diploma of Associate in Arts

- a. Two full courses in English. (English 101 and 116, to be taken during the first year.)
- b. Two pandemic courses: Natural Science 101 and Social Science 101.

<sup>\*</sup> A full course represents three hours of class work per week for a full academic year, with the required additional laboratory or studio work. A three-hour course followed for one term only is therefore a half-course.

- c. In the Natural Sciences Division, at least one additional course but not more than two.
- d. In the Social Sciences Division, at least one additional course.
- e. In the Humanities, Social Sciences, and Commerce Divisions the remainder of the eleven courses, not more than two of which may be in Commerce.
- f. Students will attend seminars as arranged in the guidance programme of the College and will participate in the health programmes provided.

# Curriculum for the Diploma of Associate in Science

- a. At least one and one-half courses in English (English 101 in the first year).
- b. Two pandemic courses: Natural Science 101 and Social Science 101.
- c. At least one full course in each of Biology, Chemistry, and Physics, and at least two full courses in one of these three.
- d. At least one full course in Mathematics (exclusive of Mathematics 100 and 102).
- e. The remainder of the eleven courses to be selected from any of the Divisions.
- f. Students will attend seminars as arranged in the guidance programme of the College and will participate in the health programmes provided.
- g. Students preparing for the medical secretaryship may substitute Accountancy 101 for Mathematics, and omit Physics,

# Curriculum for the Diploma of Associate in Commerce

- a. At least one and one-half courses in English (English 101 in the first year).
- b. Two pandemic courses: Natural Science 101 and Social Science 101.
- c. At least one full course in Mathematics, exclusive of Mathematics 100. (Mathematics 102 and 103 are recommended for Commerce students.)
- d. In Accountancy, at least Accountancy 101.
- e. In Economics, at least Economics 101.
- f. Commerce 105.
- g. The remainder of the eleven courses to be selected from any of the Divisions.
- h. Students will attend seminars as arranged in the guidance programme of the College and will participate in the health programmes provided.

# SPECIAL PROGRAMMES OF STUDY

#### Senior Matriculation

Students who wish, at the end of the first year, to transfer to McGill University, may prepare for the appropriate senior school certificate examinations of that University. Before registration they should consult the Registrar regarding their selection of courses.

# **Engineering Matriculation**

Arrangements have been made with McGill University whereby students preparing at Sir George Williams College for entrance to the Faculty of Engineering of the University may take English 101 and 116 (or English 100 if their mother tongue is other than English) in lieu of senior matriculation English, and Natural Science 101 in lieu of the optional subject required for engineering matriculation, and may write Sir George Williams examinations only in these three courses. They must continue, however, to write McGill senior matriculation examinations in the required courses in Chemistry, Physics and Mathematics.

# Preparation for Entrance to Graduate Faculties and University Professional Schools

Students intending to transfer after graduation from Sir George Williams College to a university graduate faculty or professional school should consult the Registrar upon entrance to the College in order that their programmes of study may be planned to satisfy the entrance requirements of the university they expect later to attend, as well as the requirements for the degree or diploma they seek in the College.

It is generally recognized that the obtaining of a bachelor's degree does not necessarily imply the ability to do graduate work or research. However, students who, in the opinion of the Faculty, have exhibited during the period of their course those special abilities which are required in order to do successful university professional school work or research may be given a Certificate of Recommendation to Graduate Faculties and University Professional Schools upon application to the Faculty Council. Students who do not merit this Certificate will not be supported by Sir George Williams College in applying for admission to such professional schools or universities.

It is standard practice for university graduate schools to require of applicants not only a high standard of previous academic performance but an extended amount of undergraduate specialization or "majoring" in the specific subject in which the advanced degree is sought, sufficient to enable the student to commence immediately upon the graduate courses. Graduates of high standing in a general

SIR GEORGE WILLIAMS COLLEGE

college course are therefore usually required to take additional work in their subject, sometimes to the extent of a "qualifying year", before proceeding to the work for higher degrees.

Students wishing to take a degree for the purpose of entering the teaching profession should note that our degree has not yet been accepted for purposes of the High School Teachers' Diploma of the Province of Quebec.

# Y.M.C.A. Secretaryship Training

Young men and women wishing to prepare themselves as secretaries in the Canadian Y.M.C.A. may do so in the College by choosing for the B.A. degree the maximum possible number of courses in the social sciences division, including the special courses leading to the Diploma in Association Science. A special announcement may be obtained from the Registrar.

# The Chartered Institute of Secretaries

Certain courses offered by the College may be taken for the Intermediate Examination of the Chartered Institute of Secretaries. It is expected that courses preparing for the Final Examination of the Institute will be available during subsequent academic years. A more complete statement regarding this matter may be obtained from the Registrar.

# Preparation for Entrance to the Study of Medicine

Students preparing at Sir George Williams College for admission to the Faculty of Medicine of McGill University may take the B.A. or B.Sc. course, at least three years of either being required for admission, although the complete degree course is preferable and usually is insisted upon by the medical school.

Such students must be sure to include among their courses these four: Inorganic Chemistry—Chemistry 101, or 102. Organic Chemistry—Chemistry 105. General Biology—Biology 101. General Physics—Physics 101 or 102. Since all applicants for admission to the study of medicine in Quebec must be approved by the College of Physicians and Surgeons, their wishes should also be observed. It is imperative, therefore, for pre-medical students to include in their programmes such "classical" courses as Philosophy (at least two courses), World Literature, Humanities, Latin (high school Latin will satisfy). It should be noted also that they much prefer a pre-medical student to have a B.A. rather than a B.Sc. degree. A suggested program of studies may be obtained from the Registrar's office.

Students planning to study medicine at universities other than McGill should consult the Registrar of the College for information regarding required pre-medical courses.

# Preparation for Entrance to the Study of Dentistry

Students preparing at Sir George Williams College for admission to the Faculty of Dentistry at McGill should take the B.Sc. Course, at least two years of which is required for admission.

Such students must be sure to include among their courses these four: Chemistry 101, Physics 101, Biology 101 and Chemistry 105.

# Specialization in Textile Dyeing

In cooperation with the Canadian Association of Textile Colourists and Chemists, the College offers a group of courses for those engaged in, or preparing for employment in the textile industry. Students who complete the required courses may, if they wish, write the external examinations of the City and Guilds of London Institute for which the College is an official examining centre. A detailed outline of this programme of studies may be obtained on request. These courses also may be included in curricula leading to the diploma of Associate in Science and the degree Bachelor of Science.

# **Courses for Practical Engineers**

Among the scientific and technical courses offered by the College are many which may be helpful to non-graduate practical engineers. Such courses are valuable in advancing technical competence and providing a background of scientific knowledge for work done daily on the job. They may be credited toward the degree of Bachelor of Science in the College. They are of assistance in providing educational background at the pre-professional level to those who are preparing to write the qualifying examinations of the Corporation of Professional Engineers of the Province of Quebec (P.E.Q.) or other professional engineering bodies.

# Specialization in Accountancy

Any undergraduate in the Bachelor of Science (Commerce) course may specialize in accountancy within the curriculum for the degree.

Those who wish, after graduation in Commerce to qualify for the degree of C.A. (Chartered Accountant) may do so by arrangements made with the Institute of Chartered Accountants of Quebec. Since courses in the degree programme should be chosen carefully throughout for this purpose, students planning to become chartered accountants should consult the Registrar for further details.

# **Chartered Accountants**

Students holding the Bachelor of Science (Commerce) degree from Sir George Williams College are now exempt from certain courses and examinations required by the Institute of Chartered Accountants of Quebec, and from two of the five years of apprenticeship required for the C.A. degree. Further information may be obtained from the Registrar.

# **Certified General Accountants**

It is possible, also, for students of the College to prepare for the examinations of the General Accountants Association which grants the title of C.G.A. (Certified General Accountant). This may be done by making an appropriate selection of unit courses, or by including the required courses in programmes leading to the diploma of Associate in Commerce or to the degree of Bachelor of Science (Commerce). Further information may be obtained from the Registrar.

# Specialization in Secretarial Training

The inclusion of courses in stenography and other appropriate subjects in the two-year curricula leading to the diploma of Associate makes possible programmes of study particularly adapted to those wishing to prepare for employment as business secretaries, medical secretaries or legal secretaries. Suggested selections of courses are listed on page 46.

# Specialization in Fine or Commercial Art

Outlined on page 45 is a suggested selection of courses designed for those wishing to include specialization in fine or commercial art in a course leading to the diploma of Associate in Arts or the degree Bachelor of Arts.

# Specialization in Advertising

A program of advertising and related subjects may be followed in either a one or two year course. Further particulars may be obtained from the Registrar.

# Other Especially Planned Programmes

Students wishing a programme of study different from any of those suggested above or below are invited to discuss their plans with an officer of the College. Students whose mother tongue is other than English particularly are urged to take advantage of the special arrangements which can be made to suit their needs.

# Suggested Selection of Courses in the First Two Years

These suggestions as listed below are arranged to suit the schedules of day division students. Evening division students may follow the same outlines by selecting some of the "first year" courses in their first year, the balance of these and some of the "second year" courses in their second year, and the balance of the "second year" courses in their third year.

	FIRST YEAR		SECOND YEAR	3
Curriculum Arts General Course	Course Cr English 101 English 116 Natural Science 101 Selected	edit 1 1 1 3	Course C English 102 Social Science 101 Selected	redit 1 1 3
ARTS Fine or Commercial Art	English 101 English 116 Natural Science 101 Fine Arts 103 Fine Arts 102-106 (if available) Selected	1 1 1 1 1	English 102 Social Science 101 Fine Arts 103 Fine Arts 102-106 (if not previously taken) Humanities 101	1 1 1 1 1
ARTS Social Science	English 101 English 116 Natural Science 101 Social Science 101 History 101 Selected	1 1 1 1 1	English 102 Biology 101 Economics 101 Psychology 101 Sociology 102	1 1 1 1
SCIENCE General Course	English 101 English 116 Natural Science 101 Two of: Biology 101 Chemistry 101 or 102 Physics 101 or 102 Mathematics 101 or 101A	1 1 1 2	Social Science 101 Biology 101 or Chem istry 101 or 102 or Physics 101 or 102 An advanced course in Biology, Chem- istry or Physics Selected	2 1

Students preparing for entrance to the Faculty of Engineering at McGill University will take the first year of the general course in Science, choosing Chemistry and Physics but not Biology.

# Courses Permitted as First Year Selections

NATURAL SCIENCES		HUMANIT	IES	SOCIAL SCIENCES	
Course Cr	edit	Course	Credit	Course C	redit
Natural Science 101 Biology 101 Chemistry 101 Chemistry 102 Chemistry 103 Draughting 101 Mathematics 100 Mathematics 101 Mathematics 101A Physics 101 Physics 102 Textiles 101	1 1 1 1 1	English 100 English 101 English 116 English 119 English 124 Fine Arts 101 Fine Arts 103 Fine Arts 106 French 101 German 101 Greek 101 Italian 101 Latin 101 Russian 101 Spanish 101	1 1/2 1/2 1/2 or 1 1/2	Social Science 10 Accountancy 101 Commerce 105 Commerce 107 Commerce 111 Commerce 121a Commerce 122a Commerce 124 History 101 History 103 History 109	

	FIRST YEA	R	SECOND YEA	AR .
Curriculum	Course	Credit	Course	Credit
SCIENCE Textile Dyeing	English 101 English 116 Natural Science 10 Chemistry 101 or 1 Textiles 101 Mathematics 101 101A Selected	102 1	Social Science 101 Biology 101 Physics 101 or 102 Chemistry 105 Textiles 102 Textiles 103	1 1 1 1 1 1/2 1/2
SCIENCE Medical Secretary	English 101 English 116 Natural Science 1 Chemistry 101 or 1 Biology 101 Commerce 121a Commerce 122a		An advanced cour in Biology English 118 English 119 Social Science 101 Accountancy 101 Commerce 121b Commerce 122b	se 1 1/2 1/2 1 1 1 1 1/2 1/2 1/2
Commerce General Course	English 101 English 116 Natural Science 10 Social Science 10 Accountancy 101 Commerce 105	1 1	Commerce 124 English 119 Economics 101 Mathematics 102 Mathematics 103 Selected	1/2 1/2 1 1/2 1/2 1/2 2
Commerce Business Secretary	English 101 English 116 Natural Science Social Science 10 Accountancy 101 Commerce 105 Commerce 121a Commerce 122a	1 1 or	Commerce 124 English 119 Accountancy 101 Commerce 105 Mathematics 102 Mathematics 103 Economics 101 Commerce 121b Commerce 122b	or 1 1/2 1/2 1/2 1/2 1/2 1/2
Commerce Legal Secretary	English 101 Natural Science Social Science 10 Accountancy 10 Commerce 105 Commerce 121a Commerce 122a	01 1	Commerce 124 English 119 Mathematics 102 Mathematics 103 Economics 101 Commerce 106 Commerce 113 Commerce 120 Commerce 121b Commerce 122b	

# **OUTLINES OF SUBJECTS**

On the following pages are given brief outlines of the various courses of study offered in the College. These courses are offered in both Day and Evening Divisions. Students should consult the requirements of the Curricula (pages 34-35) before making their selections. Each of these courses may be taken separately, as a unit course, by Partial Course Students in the Evening Division.

A two-term course continues throughout the whole academic year; a one term course for half the year only.

The College reserves the right to alter without notice the content of any of the courses listed in the following pages, to change the schedule of courses offered, and to cancel any course for which there is insufficient registration.

# THE NATURAL SCIENCES DIVISION

Note: Students requesting admission to advanced courses in Biology, Chemistry, Mathematics and Physics must have their courses approved by the professors concerned.

#### Natural Science 101. General Course in the Natural Sciences

A pandemic course providing an introduction to the basic sciences necessary for an intelligent appreciation of the world of our day. Science is presented as a unity. The aim is to help the individual to see himself in relation to the universe, to free himself from superstition and prejudice, to gain criteria for the estimation of truth and to rely upon established truth for the ordering of his own life, to appreciate the leadership of the specialist in particular and scientific method in general for solving individual and world problems; -in short to guide constructively the beliefs and attitudes of the student. Incidentally the student gains a view of the various branches of science which may help him to choose more effectively his further courses. The subject matter dealt with is as follows: (a) animals and plants, their functions and relations; heredity and environment; adaptative change; man's place in nature; health and disease; man's behaviour; prehistoric man; the development of civilization, culture, industry, etc. (b) the earth in space, the universe; the earth's crust, soil, minerals, rocks, strata, fossils; the nature of matter, energy, radiation, etc.; science applied through machines, etc.; scientific method; the great scientists and their contributions. Lectures, demonstrations and field trips. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

# Natural Science 102. Principles of Descriptive Geology

The purpose of this course is to introduce the student to the fundamental branches of geology, chiefly as exemplified in his own environment. The principles of mineralogy and petrology are illustrated by local material. Historical geology is also dealt with at some length. Lectures and periodic field trips. (Half course.)

Day Division: October to January, 1947-48 and alternate years. Evening Division: October to January, 1948-49 and alternate years. Summer term, 1947.

# Natural Science 103. Introduction to Descriptive Astronomy

This course comprises brief descriptions of the various celestial objects, their motions and relationships, providing the student with a concept of the universe as a whole. It includes lectures copiously illustrated with lantern slides; assigned readings which make the student familiar with useful reference books; and telescopic observations through the co-operation of the Royal Astronomical Society of Canada, Montreal Centre, whose 6-inch instrument is made available. The material covered in the course provides a basis for later more detailed reading and study. No special preparatory work is required, though the student will find Natural Science 101 a useful preliminary. (Half course.)

Day Division: February to May, 1947-48. Evening Division: February to May, 1948-49.

#### Natural Science 104. History of Science

The purpose of this course is to allow the student to trace the development of the great scientific movements and discoveries from the earliest times to our day. Emphasis is placed on the interdependence of the various branches of science and the relation of science to social development. (Half course.)

Day Division: Not given 1947-1948. Evening Division: Not given 1947-1948.

# Natural Science 105. Principles of Gemmology

This course deals with the nature and uses of gemstones from the scientific point of view. It is intended both for the layman, and, as an introduction, for the person who may be dealing with gems in his occupation. (Half course.)

Day Division: Not given 1947-48.

Evening Division: February to May 1948-49 and alternate years.

#### BIOLOGY

#### **General Courses**

# Biology 101. General Biology

The purpose of this course is to develop an interest in, and an understanding of living organisms. The student is introduced to the various fields of biological science and to the principles and concepts which have been developed. The contributions of Biology to human welfare, the understanding of the biological nature of man together with his relationship to his biological environment form the central theme of the course. The laboratory work will acquaint the student with the principal types of plan and animal organisms, illustrate certain biological concepts, and give him an introduction to the techniques and methods of the biological sciences. Natural Science 101, or the equivalent, should be taken previously or concurrently. Lectures and laboratory. (Full course).

Day Division:

October to May, every year. Evening Division: October to May, every year.

Summer term, 1947.

# Biology 102. Genetics and Human Welfare

This course attempts to make the student thoroughly familiar with the principles of heredity as understood by modern biology. It also deals with the application of genetic principles to organisms including man. The biological basis of social problems and social evolution is dealt with at some length. The doctrine of organic evolution and its implications for human life and welfare are also considered. Natural Science 101, and, preferably, Biology 101 are prerequisite for this course. (This course may be taken for credit either as a Natural Science of as a Social Science.) (Full course.)

October to May 1948-49 and alternate years. Day Division: Evening Division: October to May 1947-48 and alternate years.

# Biology 108. Ecology

A study of the relations of plants and animals to their environment. The following topics are dealt with: Types of environments and their physical conditions; biological formations, associations and communities; the community as a unit; dominance in the community; community successions, seasonal and ecological; food chains; animal numbers, cycles in numbers; the conservation problem; balance of nature, carnivore-herbivore interactions; biotic control of agricultural pests, etc., soil and water conservation. Pre-requisites: Natural Science 101 and Biology 101 or their equivalents. Lectures and periodic field trips. (Half course.)

Day Division: October to January, 1947-48, and alternate years. Evening Division: October to January, 1948-49, and alternate years.

# Biology 112. Social Biology

The course includes a study of social life among animals and the biological problems involved. Population, food supply, migrations, protection and reproduction of social organisms are discussed. The biological aspects of the same problems in human society are dealt with. The student is shown human society against the background of other animal societies; resemblances and differences being used to bring out the common fundamental problems of all social life. Pre-requisites: Biology 101 and one or more courses in the field of Social Science. (Half course).

Not given 1947-48. Day Division: Evening Division: Not given 1947-48.

# Zoology

# Biology 103. Embryology

A course dealing with the processes concerned in the growth and development of the vertebrate individual, with special attention to the embryology of Man. The descriptive material, constituting approximately one half of the course, is treated comparatively; in the second half, a comprehensive introduction into the field of modern, experimental embryology is given. Pre-requisite: Biology 101 (or equivalent), and desirably also Biology 105, or Biology 106. Lectures and laboratory. (Half course.)

October to January, 1948-49, and alternate years. Day Division: Evening Division: October to January, 1947-48, and alternate years.

# Biology 104. Histology and Microscopic Technique

This is primarily a practical course in the preparation and staining of plant and animal tissues. Procedures such as blood counting, blood staining and smears of various types are given special consideration. The histology of tissues is dealt with theoretically as well as practically. The lectures are primarily concerned with the histology part of the course, and the laboratory periods are reserved for microscopic technique. (Half course.)

Day Division: February to May, 1948-49. Evening Division: February to May, 1947-48.

# Biology 105. General Physiology

A course in functional zoology. The principal physiological processes, nutrition, circulation, respiration, excretion, co-ordination and reproduction are dealt with in a comparative manner. The fundamental similarity of these processes in all animals is stressed. An introduction to the nature of protoplasm and the functioning of the cell is included. The practical study of some of the simpler physiological processes forms the basis of the laboratory work. Pre-requisites: Biology 101, Chemistry 101 and Physics 101, or the equivalents. A knowledge of organic chemistry also is desirable. Lectures and laboratory. (Full course.)

Day Division: October to May, 1947-48, and alternate years. Evening Division: October to May, 1948-49, and alternate years. Summer term, 1947.

# Biology 106. Veterbrate Zoology

The bulk of the course is concerned with the comparative anatomy, interrelationships and evolution of the chordate animals, although the problems of their development, physiology, ecology and distribution are not overlooked. The course provides a good background for the student proceeding to the study of human anatomy and physiology. In the laboratory, representatives of the principal vertebrate classes are dissected. Pre-requisite: Biology 101 or its equivalent. Lectures, laboratory and field trips. (Full course.)

Day Division: October to May, 1947-48, and alternate years. Evening Division: October to May, 1947-48, and alternate years.

#### Botany

# Biology 111. General Botany

A general course on the plant kingdom with about half of the course being spent in a consideration of the flowering plants. Taxonomy, morphology and life histories are dealt with, but the principal stress is placed on the physiology of plants, their distribution, ecological requirements and economic values. Lectures and laboratory. (Half course.)

Day Division: February to May, 1947-48, and alternate years. Evening Division: February to May, 1948-49, and alternate years.

# Advanced Biology

# Biology 109. Advanced Biology

Under this title there may be taught from time to time as the need arises various special fields of biology which are not regularly offered, e.g., Invertebrate Zoology, Cytology, Parasitology, Plant Anatomy or Physiology, Palæontology, etc. Such a course may be given on the request of a sufficient number of interested and properly qualified students. It may on the other hand be scheduled by the college, which may require students working for the major in Biology to register for the course. No student will be registered for this course without the approval of the professor of Biology. (Half or full course depending on the nature of the subject covered.)

# Major in Biology

Attention is called to the statement on majors on p. 36.

#### CHEMISTRY

# Chemistry 101. Introduction to General Inorganic Chemistry

This course is intended as an introductory course for those students who have had little or no previous study of this subject. A comprehensive exposition of the fundamental principles and theories is given, as well as a general consideration of the properties of the most important elements and their compounds. Full course including two hours of laboratory work per week.

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

# Chemistry 102. General Inorganic Chemistry

Pre-requisite: High School Leaving, Chemistry. A fundamental and historical development of the theory of inorganic chemistry is made, with mathematical treatment of equivalent, molecular and atomic weights, the laws of gases and solutions, and the principle of chemical equilibrium. The electron structure of matter is employed as the unifying concept for valence, periodic table, chemical combination and reaction. A descriptive study of colloids, metals and non-metals is given. Full course including two hours of laboratory work per week.

Day Division: October to May every year. Evening Division: October to May, every year.

# Chemistry 103. Qualitative Analysis

Pre-requisite: Chemistry 101 or 102, Mathematics 101. Subject matter includes discussion of valence, ionization, the Bronsted-Lowry theory of acid and bases, co-ordination theory, complex ions, and balancing of oxidation-reduction equations. A quantitative treatment of the Law of Chemical Equilibrium is applied to ionization, precipitation, hydrolysis, etc. The laboratory work consists of the systematic identification of the cations and anions in a series of unknown solutions, after a study of the chemical reactions upon which their separation and detection are based. Full course including four hours of laboratory work per week.

Day Division: October to May, every year. Evening Division: October to May, every year.

# Chemistry 104. Inorganic Quantitative Analysis

Pre-requisite: Chemistry 103, Mathematics 101, Physics 101. This course deals with the fundamental principles of quantitative analysis including gravimetric and volumetric methods, use of the balance, apparatus, errors, etc. The lectures involve the application of the Equilibrium Law to ionization, precipitation, ph, oxidation-reduction and electrolytic separations. Modern intrumental methods of analysis such as colorimetry, voltammetry, nephelometry, etc., are discussed insofar as time will permit. The scope of this course is similar to that covered in Kolthoff and Sandell "Textbook of Quantitative Inorganic Analysis". The laboratory work includes, in addition to the standard methods of estimation of single constituents, the systematic analysis of a brass and a limestone. Full course including 6 to 8 hours of laboratory work per week.

Day Division: October to May, every year.

Evening Division: October to May, 1947-48 and alternate years.

# Chemistry 105. Organic Chemistry

Prerequisite: Chemistry 101 or 102. The ground covered is that usually given in a first course in organic chemistry together with considerable more advanced work in this subject. Lectures deal with the aliphatic and aromatic series, isomerism, stereo-chemistry, determination of the structure of compounds and the mechanism of reactions. Full course including 4 hours of laboratory work per week.

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

# Chemistry 106. Carbohydrates, Fats, Amino-acids, and Proteins

Pre-requisite: Chemistry 105. Half Course: Lectures only. Day Division: October to January, not given 1947-48.

Evening Division: October to January, 1947-48, and alternate years.

# Chemistry 108. Physical Chemistry

Pre-requisite: Chemistry 101 or 102, Physics 101, Mathematics 101. Kinetic theory is applied to gases, critical phenomena and solutions. Elementary thermodynamics and electrochemistry are discussed, including Faraday's Laws, conductance and electromotive force of cells. Homogeneous and heterogeneous equilibria of simple systems are covered. The scope of this course is similar to that covered in the corresponding chapters of Getman and Daniels "Outline of Physical Chemistry". Full course including a 2-hour problem period per week.

Day Division: October to May, every year. Evening Division: October to May, every year.

# Chemistry 109. Chemical Thermodynamics

Pre-requisite: Chemistry 108, Mathematics 105. Development of the first two laws of thermodynamics serves as a basis for a more advanced treatment of gases, liquids, thermochemistry, electrochemistry, surface chemistry, colloids, equilibrium and phase rule. Pre-requisite: Chemistry 108, Mathematics 105 or 111. (Full course, lectures only.)

Day Division: Not given 1947-48.

Evening Division: October to May, 1947-48, and alternate years.

#### Chemistry 110. Industrial Inorganic Chemistry

For best results this course should be followed by Chemistry 114. Pre-requisite: Chemistry 101 or 102. This course involves a study of industrial chemical processes and practices pertaining to inorganic chemicals and products. The industries covered include those concerned with mineral acids, alkalies, synthetic ammonia, fertilizers, cements, ceramics, glass, electrothermal products, electrolytic metallurgy, and water treatment. (Half-course, lectures only.)

Day Division: Not given, 1947-48.

Evening Division: October to January, every year.

### Chemistry 111. Advanced Organic Chemistry.

Pre-requisite: Chemistry 105. This course deals mainly with the theories of organic chemistry. The concept of resonance is developed and is used to explain the structure and reactions of organic compounds. Some of the more important reaction mechanisms are discussed in the light of present-day knowledge. (Half-course, lectures only.)

Day Division: Not given 1947-48. Evening Division: Not given 1947-48.

# Chemistry 112. Bio-chemistry

Pre-requisite: Chemistry 105. Chemistry 106 and Biology 105 are recommended as pre-requisite or concurrent courses. A study is made of the physiological significance (metabolism) of the carbohydrates, fats, proteins and related substances, the functions of hemoglobin, acid-base balance in the body, energy output and calorific requirements of the human being, as well as vitamins and their functions. Full course, including 4 hours of laboratory work per week.

Day Division: Not given 1947-48.

Evening Division: October to May, 1948-49, and alternate years.

#### Chemistry 113. Qualitative Organic Analysis

Pre-requisite: Chemistry 104, Chemistry 105. The student is provided with a thorough training in the identification of organic compounds, as outlined in the well-known text on this subject by Shriner and Fuson. After a period of study of various identification reactions and the solution of numerous problems, the student is required to identify several unknown compounds. Full course including 4 hours of laboratory work per week.

Day Division: Not given, 1947-48.

Evening Division: October to May, 1947-48, and alternate years.

#### Chemistry 114. Industrial Organic Chemistry

For best results this course should be preceded by Chemistry 110. Pre-requisite: Chemistry 105. This course is similar in nature to Chemistry 110, but deals with the field of organic materials. Among the industries discussed are those concerned with organic syntheses, fermentation, coal and wood distillation, petroleum refining, oils and fats, pulp and paper, paints, resins and plastics, rubbers, asphalts, etc. (Half-course, lectures only.)

Day Division: Not given, 1947-48.

Evening Division: February to May, 1947-48 and alternate years.

Chemistry 115. Chemistry of High Polymers

Pre-requisite: Chemistry 105, Chemistry 108. This course is intended to outline the fundamental characteristics of macromolecular substances, both natural and synthetic. A survey is made of the more significant polymers in the fields of plastics, resins, rubbers, carbohydrates, proteins, etc., and an attempt is made to correlate available knowledge about chain structure with the physical properties of the substances concerned. Attention is drawn to the special problems arising from attempts to accurately characterize a macromolecule. The two main types of polymerization reactions, addition and condensation, are discussed from the viewpoint of methods of polymerization and reaction mechanism. (Half-course, lectures only.)

Day Division: Not given 1946-47.

Evening Division: February to May, every year.

# Major in Chemistry

Attention is called to the statement in majors on page 36.

#### DRAUGHTING

Note: Only undergraduates may take these courses as Draughting 101, 102 and 103, and they may not apply more than two course credits in Draughting toward a degree or diploma. Partial course students who wish Draughting are referred to Draughting 1, 2 and 3 as listed in the announcement of the evening division of Sir George Williams Business School. There also will be found allied courses in Blueprint Reading, Estimating, Strength of Materials, and Practical Mathematics.

Draughting 101. Elements of Draughting

A practical course designed to give a thorough training in the elements of engineering drawing to those engaged or about to be engaged in machine, aviation, structural, architectural or electrical draughting, including the reading of blue prints, use of draughting instruments and the making of tracings and original drawings. The course includes: selection and use of drawing instruments and materials, lettering, projection drawings, three-view drawings of simple objects, order of pencilling, order of inking, curved work, applied geometry, tangency problems, dimensions and notes, scaled drawings, auxiliary projection, revolution, sectional views, conventional sections, conventional practices and symbols, code for materials in section, working drawings, classes of working drawings, assembly drawings, detail drawings, plant layouts, tabular drawings, commercial practices, chemical and electrical engineering drawings, tracings blueprinting and other duplication processes, elements of architectural drawings. Students who have not had three or four years of high school mathematics, and who intend to take Draughting until they complete Draughting 103, should also take the Business School Course in Practical Mathematics, or the equivalent. Lectures and practice. (Full course.)

Day Division: Not given 1947-48.

Evening Division: October to May, every year.

# Draughting 102. Advanced General Draughting

An advanced course arranged to suit students in every branch of engineering drawing, in conformity with the best current industrial practices. The course includes the application of the geometrical principles used in the various types of Engineering drawings, and covers the conic sections, cycloidal and involute curves, the spiral of Archimedes and the cylindrical and cornical helices, the various methods of developing surfaces, intersections of various surfaces, determination of the locus of all the points common to two intersection surfaces, screw surfaces-types of screw threads, conventional thread representations, locking devices,

different types of screws and special bolts, helical springs, riveted joints, keys and keyways, pipes and fittings, pipe threads, pipe connections and joints, isometric, dimetric and trimetric projections, oblique projections, theory and practices in perspective projections as used by Engineers and architects, different types of perspectives, technique and shortcuts in making perspective drawings, shades and shadows in orthographic and perspective projections, technical and pictorial sketching.

Students taking Draughting 102 should also take Strength of Materials concurrently as a pre-requisite to Draughting 103. Lectures and practice. (Full course.)

Day Division: Not given 1947-48.

Evening Division: October to May, every year.

# Draughting 103. Machine Drawing and Design

This course is designed to consolidate the work previously covered in engineering drawing, introducing the practical elements of machine design. The course includes further practice in the making of more complicated working drawings of machines and their parts, general consideration and procedure affecting design, materials used in the design of machines, design of cams, motions and linkages, allowances, tolerances, and fits, shrink and force fits, strength of screwed fastenings, riveted joints, keys and cotters, pipes and thin walled cylinders, expansion joints, supports for pipe lines, shafts and axles, couplings and clutches, journals and bearings, belts and pulleys, friction wheels, toothed gears, design of various machine parts. Lectures and practices. (Full course.)

Day Division: Not given 1947-48.

Evening Division: October to May, every year.

#### MATHEMATICS

#### Mathematics 100. Elements of Mathematics

This course is offered for students who have not had the usual pre-college training in mathematics. Subject matter: Elementary algebra up to and including simultaneous quadratic equations, and indices; certain theorems and problems in plane geometry. Students who have received credit towards their admission for High School Mathematics will not receive credit for this course. Students may have the option of taking an extra tutorial period, and may be required to do so at the instructor's discretion. (This course, when taken, will not satisfy the requirements in Mathematics for the diploma of Associate in Science or Commerce, or the degree of Bachelor of Science, but may be credited as an option in the Natural Sciences Division.) (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

# Mathematics 101. Algebra and Trigonometry

(a) Algebra: Ratio; proportion; variation; arithmetic, harmonic and geometric progressions; theory of quadratics; permutations and combinations; the binomial theorem; graphical algebra. (b) Trigonometry: Definition of trigonometric functions; identities; functions of multiple angles; transformation of sums and differences of functions; solution of triangles by use of four-place logarithms; inverse trigonometric functions. (c) Tutorial: Supervised practice in the solution of problems in algebra and trigonometry. Analytic Geometry may be taben with this course if desired. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

# Mathematics 101A. Algebra, Trigonometry and Analytic Geometry

This course is offered as a first college course in mathematics for students who have a satisfactory knowledge of high school intermediate mathematics, and as a second course for students who have completed Mathematics 101 or its equivalent and may not wish to take a more advanced course in their second year. (a) Analytic Geometry: Straight line and circle, change and rotation of axes. (b) Algebra: Review of variation, theory of quadratics, permutations and combinations, and the binomial theorem, and, in addition, graphical algebra and functional notation, elements of the calculus. (c) Trigonometry: Review of sum and difference formulae and solution of triangles by logarithms, and, in addition, inverse functions, general values, limits and approximations, DeMoivre's theorem. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

#### Mathematics 101C

See the Commerce Division page 90. (This course may not be taken for credit as a Natural Science, nor to satisfy the requirements in Mathematics for the diploma of Associate in Science, or for the degree of Bachelor of Science.

### Mathematics 102. Mathematics of Finance

See the Commerce Division, page 90. (This course may not be taken for credit as a Natural Science, nor to satisfy the requirements in Mathematics for the diploma of Associate in Science or the degree of Bachelor of Science.)

# Mathematics 103. Statistical and Graphical Methods

The elementary principles of statistical method as applied in the scientific study and interpretation of economic and social phenomena. The course includes the study of averages, percentiles, measures of dispersion and central tendency, tabulation, frequency distribution, frequency curves, correlation, index numbers, graphical representation and classification, etc. (Half course.)

Day Division: February to May, every year. Evening Division: February to May, every year. Summer term, 1947.

# Mathematics 104. Algebra and Analytic Geometry

Subject matter: determinants, analytic geometry of the straight line, circle, parabola, ellipse and hyperbola, translation and rotation of axes, polar coordinates, the general equation of the second degree, curve tracing in both Cartesian and polar coordinates. (Full course.)

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

### Mathematics 105. Calculus

Subject matter: Constants, variables, definition of a continuous function; limits, the derivation of simple algebraic functions, differentiation of exponential, logarithmic, and transcendental functions; inverse trigonometric and hyperbolic functions; application of derivatives to physical problems, partial differentiation, integration, application of integration to areas, volumes and lengths of plane curves; applications to problems of physics and physical chemistry. It is recommended that students wishing to take this course should take Mathematics 104 previously or concurrently. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

59

# Mathematics 106. Advanced Algebra and infinite Series

Subject matter: Complex quantities, determinants, matrices, theory of equations, the general cubic and quartic equations, convergence of infinite series, and various tests for convergence, uniform convergence, and introduction to real variable theory.

Day Division: October to May, 1948-49 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

# Mathematics 107. Differential Equations

For students who have completed Mathematics 105 or its equivalent. Subject matter: Differential equations of the first order, homogeneous equations, envelopes, singular solutions, the linear differential equation, complementary function, particular integrals, simultaneous differential equations, equations of the second order, Clairant's Form, Legendre's equation, Bessel's equation. Applications to problems of physical chemistry, dynamics and electricity. (Half course.)

Day Division: Not given 1947-48.

Evening Division: October to January, every year.

#### Mathematics 108. Advanced Calculus

For those who have completed Mathematics 107 or its equivalent. Subject matter: Infinite series, Fourier series, partial differentiation, multiple integrals, line and surface integrals, Green's theorem, Stoke's theorem, Dirichlet's integral, gamma and beta functions, partial differential equations. Applications to problems of physics. (Half course.)

Day Division: Not given 1947-48.

Evening Division: February to May every year.

#### Mathematics 109. Solid Analytic Geometry and Vector Analysis

Subject matter: coordinates in three dimensions, spherical and cylindrical polar coordinates, the plane, surfaces of the second degree, conicoids, tangent plane, osculating plane, centre and radius of spherical curvature, curvature and torsion of a helix, scalar and vector products, gradient, divergence, and curl, and applications to electro-magnetic theory. (Full course.)

Day Division: Not given, 1947-48. Evening Division: Not given 1947-48.

# Mathematics 111. Applied Higher Mathematics

This course is intended chiefly for students majoring in chemistry. Subject matter: Analytic geometry with emphasis on graphical treatment of experimental data, differential and integral calculus and some simple differential equations with application to chemical kinetics, thermodynamics and other problems of physical chemistry. Pre-requisite: Chemistry 101 or 102, Physics 101 or 102 and Mathematics 101, including the analytic geometry of the straight line and circle. (This course may not be taken to satisfy the requirements of a major in Mathematics.) (Full course.)

Day Division: October to May, 1947-48. Evening Division: Not given, 1947-48.

# Major in Mathematics

Attention is called to the statement on majors on p. 38.

#### PHYSICS

### Physics 101. General Physics

This course covers mechanics, hydrostatics, sound, heat, electricity, magnetism, and light. It may be taken by students having little or no previous knowledge of physics, Mathematics 101 or the equivalent must be taken previously or concurrently. Lectures and laboratory. (Full course.)

Day Division: October to May, each year. Evening Division: October to May, each year. Summer term, 1947.

#### Physics 102. Mechanics, Heat, Light and Sound

A second year course on a higher level than Physics 101. This course is prerequisite to Physics 104, 105, 106, 107, and 109, and students should take Mathematics 105 concurrently. A knowledge of differentiation and integration of polynomials and simple trigonometrical functions is required for the section on mechanics. Lectures and Laboratory. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

#### **Elements of Communications**

An elementary course on the principles underlying electrical communications. The following subjects are treated: Elements of D.C. and A.C. circuits mainly as applied to cummunications circuits, inductance, capacity, resonance, wave motion, electrical measuring instruments elements of vacuum tubes, microphones and loudspeakers. Grade IX Mathematics is pre-requisite. Lectures and experimental work. This course does not carry academic credit.

Day Division: Not given, 1947-48. Evening Division: October to May, every year.

Four hours per week, 1st term. Two hours per week, 2nd term.

# Physics 103. Radio and Sound Reproduction

A practical course on the principles underlying electrical communication and sound reproduction. The following subjects are treated without resort to involved Mathematics:—Alternating current theory as applied to radio circuits; vacuum tubes; audio amplifiers; text instruments; radio receivers and transmitters; radiating systems; amplitude modulation and frequency modulation systems; elements of television systems. Elements of Communications and Mathematics 101 or their equivalents are pre-requisite. Lectures and experimental work. (Full course.)

Day Division: Not given, 1947-48.
Evening Division: October to May, every year.
Two hours per week, 1st term.

Four hours per week, 1st term.

#### Physics 104. Statics and Dynamics

Problems on friction, equilibrium of rigid bodies, virtual work, bending moments, centre of gravity, moment of inertia, dynamics of rectilinear motion, of a particle in two dimensions, tangential and normal accelerations, dynamics of rigid bodies, central forces, theory of orbits, Lagrange's Equations for the general motion of a particle. Mathematics 105 or its equivalent must be taken previously and Mathematics 107 should be taken concurrently. Lectures and Laboratory. (Full course.)

Day Division: October to May, 1948-49 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

SIR GEORGE WILLIAMS COLLEGE

#### 61

# Physics 105. Electricity and Magnetism

Subject matter: foundations of electrostatic and electromagnetic theory, electrical measurements, including use of post office box, dial potentiometer. Kelvin double bridge, symbolic A.C. theory and applications to bridge networks, static and dynamic characteristics of the triode vacuum tube. Mathematics 105 and Physics 102 must be taken previously. Lectures and laboratory. (Full course).

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1948-49 and alternate years.

# Physics 106. Light (Optics)

Subject matter: wave motion, wave fronts, derivation of mirror and lense formulae on Huygen's Principle, dispersion, interference, diffraction, double refraction, plane polarized light, quantum theory and origin of spectra. Mathematics 105 and Physics 102, or their equivalents must be taken previously or concurrently. Lectures and laboratory. (Half course).

Day Division: October to January, 1948-49. Evening Division: October to January, 1947-48.

### Physics 107. Thermodynamics and Kinetic Theory

Kinetic theory of gases, transport phenomena, applications of kinetic theory to viscosity and conductivity, the two laws of thermodynamics, specific heats, isothermals and adiabatics. Carnot's cycle, entropy, the Carnot-Clausius equation, thermodynamics of a fluid, change of state. Van der Waal's equation Mathematics 105 and Physics 102, or their equivalents must be taken previously or concurrently. Lectures and laboratory. (Half course).

February to May, 1948-49 and alternate years. Day Division: Evening Division: February to May, 1947-48 and alternate years.

# Physics 108. Radio and Sound Reproduction—Advanced

An advanced general radio and electronic course for students who have completed Physics 103 and Mathematics 101 or equivalent. If Mathematics 105 has not been taken, it is recommended as a concurrent course but not absolutely essential. This course includes a study of acoustics; audio systems; transmission networks; equalizers, filters; amplitude and frequency modulation methods and receivers; ultra high frequency communication and television. Lectures and experimental work. (Full course.)

Day Division: Not given, 1947-48.

Evening Division: October to May, every year.

#### Physics 109. Atomic Physics

An historical approach to nuclear physics; the charge on the electron, determination of the ratio of charge to mass for the electron, photoelectric emission, thermionic emission, conduction of electricity through gases, positive rays and isotopes, the mass spectrograph; alpha, beta, and gamma rays, acceleration of ions, X-radiation, cloud chambers, cosmic rays, neutrons, positrons, artificial transmutation, atomic fission, cyclotron, and contemporary topics, lectures and demonstrations. For students who have completed Mathematics 105 and Physics 104, 105, or their equivalents. (Full course.)

Day Division: Not given 1947-48.

Evening Division: October to May, 1948-49 and alternate years.

#### Major in Physics and Mathematics

Attention is called to the statement on majors on page 38.

#### **TEXTILES**

Note: Only undergraduates may take these courses as Textiles 101, 102, 103 and 104. Partial course students are referred to Textiles 1, 2, 3 and 4, and also to Textiles 11 (Textile Construction and Design), as listed in the announcement of the evening division of Sir George Williams Business School.

#### Textiles 101. Technology of Fibre

The course includes the following: requirements of textile fibres; classification of commercial fibres, cellulose, protein and miscellaneous; the study of important commercial fibres with reference to origin or manufacturing methods, general properties, uses in standard fabrics, precautions in wear and handling; spinning and weaving; the preparation of fabrics for dyeing and finishing. Lectures and laboratory. (Full course.)

Students taking this course are strongly urged to take Chemistry 101 and 102 previously or concurrently. The course is designed to be of direct help to people entering or already engaged in the textile industry.

Day Division: Not given, 1947-48.

Evening Division: October to May, every year.

#### Textiles 102. General Dyeing

General dyeing is studied under the following headings: dyeing machinery chemicals used in dyeing, dyestuffs considered from the point of view of their dyeing properties, laboratory methods of identification of dyestuffs, and laboratory methods of using dyestuffs. Pre-requisite: Textiles 101 or the accredited equivalent. Lectures and laboratory. (Full course).

Day Division: Not given, 1947-48. Evening Division: October to May, 1947-48 and alternate years.

# Textiles 103. Finishing Operations and Dyestuffs Laboratory Methods

Subject matter includes: water and its treatment; printing of textiles, machines and methods, including thickeners, dyestuffs and chemicals used in the printing trade; engraving; finishing of textiles including machinery, methods and chemicals used. Pre-requisite: Textiles 101 or the accredited equivalent. Lectures and Laboratory. (Full course.)

Day Division: Not given, 1947-48.

Evening Division: October to May, 1948-49 and alternate years.

#### Textiles 104. Advanced Textile Processing

A course for those who have completed Textiles 101, 102 and 103, or the accredited equivalents. It is designed to bring the student up to date on new developments in the field since his completion of the previous courses, such as: new developments in dyestuffs and methods of dyeing and printing textiles; new fibres; new finishing compounds; new auxiliary products (wetting agents, detergents). It deals also with the fundamentals of fibre structure and the theory of colour perception and colour matching, topics not included in previous courses. (Half course.)

Not given, 1947-48. Day Division: Evening Division: Not given, 1947-48.

#### **PSYCHOLOGY**

Psychology 101, 102, 103, 104, 105, 106, 107, 108, 109

(See the Social Sciences Division. Not more than one course in Psychology may be taken for credit as a Natural Science.)

#### THE HUMANITIES DIVISION

#### Humanities 101. General Course in the Humanities

This pandemic course brings the student into immediate contact with as many as possible of the masterpieces of thought and art of our cultural ancestors. The humanities are concerned with man's attempts to understand and feel at home in the world through magic, religion and philosophy. They are also concerned with man's expression of fundamental meanings and values particularly in literature, music, and art. The student is encouraged to understand the historical and institutional setting from which a given body of art or literature came, or a particular school of thought developed. The principal emphasis, however, is on the intellectual, artistic and emotional values and implications. While all of the reading required in this course may be done in English, students who can do so are encouraged to read in other languages as well. The treatment is such that a given student may draw upon the subject-matter of his whole course, as well as from the content of this subject itself, in his preparation and study. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

#### Humanities 102. French-Canadian Life and Letters

The purpose of this course is to provide an introduction to the art, folklore, literature, social institutions, philosophy and way of life of the French-Canadian. In addition to the regular lectures, from time to time French-Canadian educationists and professional men are invited to act as guest lecturers on various aspects of French-Canadian culture. The programme also includes trips to educational institutions, museums and libraries, and a prescribed reading list. All lectures and readings are in the English language. Lectures by guest speakers are open to all students of the College as well as to the general public. (Half course.)

Day Division: Not given 1947-48. Evening Division: Not given 1947-48.

#### **FNGUSH**

#### English 100. English Language and Literature

This course is designed for students who have completed secondary school or the equivalent in a language other than English and for whom, therefore, English is a secondary tongue. It attempts to provide sufficient facility in English to enable such students to study with profit in that language and to express themselves adequately. The course includes: (a) English grammar and idiom, (b) Composition and oral expression. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

#### English 101. English Composition

Advanced instruction in English composition with the purpose of enabling the student to express himself in a clear, natural and interesting way. Special attention is given to diction, vocabulary, spelling and the fundamental principles of effective composition. It is expected that this course will be completed in the first year, but provision is made for students who need additional coaching and practice to continue this study through the second year. Lectures, class work and periodic assignments are designed to train the student in the use of the library, the taking of lecture notes and the preparation for and writing of examinations. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

First half given, Summer term, 1947.

#### English 102. English Literature of the Nineteenth Century

A study of nineteenth century prose and poetry stressing the relation of English Literature to the socio-political background of the period. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

#### English 103. American Literature

A detailed survey of the large body of American prose and poetry is the object of this course. In order to provide background, the course will commence at the early colonial period, but special study will be made of nineteenth and twentieth century writers. Attention will be paid to current trends in American literature. (Half course.)

Day Division: October to January, 1947-48 and alternate years. Evening Division: February to May, 1947-48 and alternate years.

#### English 104. Political, Economic and Social Literature

For students whose primary interest is in the social sciences, the course studies those literary works which, throughout the development of modern civilization, have contributed most to the advance of political, social and economic thought. A literary background is thus provided for the evaluation and appreciation of current writing in these fields. Students are advised to complete Social Science 101 or its equivalent before taking this course. (Half course.)

Day Division: Not given 1947-48. Evening Division: Not given 1947-48.

#### English 105. Readings in the Literature of Science

For students whose primary interest is in the natural sciences, this course aims at a study of those authors in English Literature who have dealt with scientific subjects. Many of the great literary figures of both past and present are included in this list, so that the literature of science provides not only an interesting field of study but an orientation into literature for the science student. (Half course.)

Day Division: Not given, 1947-48. Evening Division: Not given, 1947-48.

# English 107. English Literature of the Seventeenth and Eighteenth Centuries

A study of the major trends in the English literature of the seventeenth and eighteenth centuries, with particular attention to the important authors. (Full course.) (*Note:* The course numbered English 107 prior to the year 1942-43 is that which is now listed as English 120.)

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1948-49 and alternate years.

# English 108. Shakespeare and the Elizabethan Drama

A general survey of the golden age of English drama, with a detailed study of the works of William Shakespeare. (Half course.)

Day Division: February to May, 1947-48 and alternate years. Evening Division: October to January, 1947-48 and alternate years.

SIR GEORGE WILLIAMS COLLEGE

65

### English 109. Canadian Literature

This course provides for the study of Canadian prose and poetry written in English. A short survey is given of Canadian literature in the French language in English translations. Particular emphasis is placed on those writers who have contributed literature about the Province of Quebec; and to those who have attained international notice and repute. (For a similar and supplementary course in French, see French 104.) (Half course.)

Day Division: February to May, 1947-48 and alternate years. Evening Division: October to January, 1947-48 and alternate years.

Summer term, 1947.

# English 110. World Literature—Classical and Medieval

Through the medium of the best English translations, this course attempts to give the student a clear knowledge and appreciation of the great masterworks of thought and expression that are an important part of his cultural heritage from the Ancient World and the Middle Ages. (Half course.)

Day Division: October to January, 1948-49 and alternate years. Evening Division: October to January, 1948-49 and alternate years.

# English 111. English Literature of the 20th Century

For those who have completed English 116 or 124, or the equivalent, and to make closer study of twentieth century writers in the English language. This course deals with authors from the beginning of the century to the present day. Students are given ample opportunity to study review methods and practice these both orally and in writing. (Full course.)

Day Division: October to May, every year.

Evening Division: October to May, 1947-48 and alternate years.

First half given, Summer term, 1947.

# English 112. Creative Writing

For advanced students with special interest and ability in written expression, instruction will be given in the various literary forms. The student will be given assignments to discover in which form of literary expression he shows most promise, after which he will be encouraged and assisted in developing his own special form and style. (Half course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

# English 113. Advanced Study of Selected Period or Author

Fourth year students who have completed successfully English 116 or 124, and 102, or the equivalent, and who wish to make an advanced study of a selected period or author will be admitted to this course. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

### English 115. World Literature—Modern

A course complementary to English 110, which attempts to extend the literary experience of the student beyond the confines of his mother tongue, and of those secondary languages which he is ordinarily able to learn. Through the medium of the best English translations, a study will be made of the outstanding literature of other modern languages, including the French, German, Russian, Italian, Spanish, and Scandinavian. (Half course.)

Day Division: February to May, 1948-49 and alternate years. Evening Division: February to May, 1948-49 and alternate years.

#### English 116. Introduction to Modern Literature

This course attempts to develop greater interest in English literature by introducing the student to the outstanding writers of the present century and to earlier writers who have contributed literary works of permanent value to the world in which we live. The course is designed as an introduction to the study of English literature in college and is not suitable for students who have taken English 124 or 102 or the equivalent. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

#### English 117. The English Bible

A brief study of the origin of the various translations of the Bible is followed by a consideration of its importance in the cultural life of the English-speaking peoples. Particular attention is then given to certain parts of the text, particularly the prophets, the psalms and the synoptic gospels. (Half course.)

Day Division: February to May, 1948-49 and alternate years. Evening Division: February to May, 1948-49 and alternate years.

#### English 119. Reports, and Précis Writing

Advanced instruction is given in report writing, précis writing and other similar forms of written expression. After a general introduction, accompanied by practice in the basic principles of writing reports, précis, minutes, news articles and other special forms, an effort is made to cater to the particular needs of each student. Class members are encouraged to co-ordinate their assignments with their other studies or their daily work. (Half course.)

Day Division: February to May, every year. Evening Division: February to May, every year.

#### English 120. Public Speaking

The aim of this course is to develop in the student the ability to express himself more effectively in every day life, as well as giving practice in speaking before groups of people. Extensive drill in outlining speech material for original and logical presentations. A study of the motivating forces in audiences, and methods of establishing contact between speaker and audience. Instruction in the preparation of speech material and constructive criticism of its delivery. Weekly practice in application of principles involved. (Half course.)

Day Division: October to January, every year. Evening Division: October to January, every year. Summer term, 1947.

# English 121. Short Story Writing

A practical course in the writing and marketing of short stories, together with a study of the general problems of writing fiction. Lecture, discussion, and criticism of written work. A critical analysis of current fiction. This course is open to any who, in the opinion of the instructor, are able to profit by it, regardless of their previous formal education. Students who have already taken English 101, and English 102, 116 or 124, or the equivalent, may take this course for credit. (Half course.)

Day Division: Not given 1947-48.

Evening Division: October to January, every year.

# English 122. Short Story Writing, Advanced Course

Students who have taken English 121 or its equivalent may enroll for a second term's study. More intensive seminar work, analysis of stories, and discussion of the student's writing problems. (Half course.)

Evening Division: Not given 1947-48.

Evening Division: February to May, every year.

SIR GEORGE WILLIAMS COLLEGE

#### English 123. Public Speaking, Advanced

The course is intended to give further practice and experience to those who have had previous public speaking training, or who have had some public speaking experience and feel the need for further improvement. Besides a review of the basic principles of speech making, the course includes formal speeches, speeches on controversial subjects, debate speeches, political speeches, etc. Opportunity is given every student to obtain experience in each of the above, followed by personal criticism from the instructor. (Half course.)

Day Division: Not given 1947-48.

Evening Division: February to May, every year.

# English 124. Survey of English Literature

A survey is made of the development of English literature from the fourteenth century to the nineteenth. An intimate acquaintance with the work of important authors of various periods is acquired, as well as an understanding of literary history. (Full course.)

Day Division: Not given, 1947-48.

Evening Division: October to May, every year.

#### English 125. The Modern Novel

A study of the origin and development of the English Novel to the end of the Nineteenth Century with special emphasis on readings from Defoe to Henry James. (Full course.)

Day Division: October to May, 1948-49 and alternate years. Evening Division: October to May, 1948-49 and alternate years.

# English 126. Appreciation of Poetry

A study of the principles of poetry and its forms, with special emphasis on the reading and analysis of representative authors. (Half course.)

Day Division: October to January, 1947-48 and alternate years. Evening Division: October to January, 1948-49 and alternate years.

#### English 127. The Modern Drama

A study of the evolution of the modern drama. Emphasis will be placed upon the plays of Ibsen, Shaw, and subsequent dramatists. (Half course.)

Day Division: October to January, 1948-49 and alternate years. Evening Division: February to May, 1947-48 and alternate years. Summer term, 1947.

### English 128. Chaucer

A preliminary study of Chaucer's life and time: a systematic reading of Chaucer's works and a detailed study of the language. (Half course.)

Day Division: February to May, every year.

Evening Division: October to January, 1947-48 and alternate years.

#### English 129. Twentieth Century Poetry

A study of the development of modern poetry in the English language from the Victorian period to the modern schools. Pre-requisite: English 126. (Half course.)

Day Division: February to May, 1947-48 and alternate years. Evening Division: February to May, 1948-49 and alternate years.

#### Major in English Language and Literature

Attention is drawn to the statement on majors on p. 37.

#### THE FINE ARTS

# Fine Arts 101. The Understanding and Appreciation of Music

To enable the student to understand and appreciate the great music of the world, and to develop taste and discrimination in music without the necessity of learning to play an instrument. The work of the course consists to a great extent in the actual hearing and analysis of the various types of music and composers, and in musically illustrated lectures and discussion. (Half course.)

Day Division: February to May, 1948-49 and alternate years. Evening Division: February to May, 1947-48 and alternate years.

# Fine Arts 102. The Understanding and Appreciation of Art

The intelligent appreciation of art, based upon an intimate acquaintance with the great art of the world in the realm of the pictorial arts, is the ultimate objective of this course. Actual study of the artistic masterpieces and of the work of various artists leads to anunderstanding of the fundamental principles of artistic expression. (Half course.)

Day Division: October to January, 1948-49 and alternate years. Evening Division: February to May, 1948-49 and alternate years.

# Fine Arts 103. Studio Course in Drawing and Painting

For undergraduate students who wish to acquire skills in drawing, sketching, water colour, oil, pastel, etching, etc., as part of their college programme, studio work is provided. As instruction is individual, this course may be taken by advanced students as well as by those who have had no previous instruction in art. As Fine Arts 103a, 103b, and 103c, this course may be taken for credit each year for as many as three years. An extra studio fee of \$10.00 is charged for this course. (Partial or unit course students wishing to study art will register in Sir George Williams School of Art. See separate announcement.) (Half course or full course.)

Day Division: October to May, every year, Evening Division: October to May, every year. Summer term, 1947.

# Fine Arts 104. The Theatre as a Reflection of the Life of its Time

Study of the development of theatrical production and the drama brings before the student the whole shifting scene of manners and customs, ideals and moral standards of the ages. This course traces the development of the theatre from the time of the Greek choric dance to the modern talking picture and legitimate stage, showing at each step how the culture of that age has been condensed and reflected in the vital and permanent art form of the theatre. (Half course).

Day Division: October to January, 1947-48 and alternate years. Evening Division: October to January, 1947-48 and alternate years.

# Fine Arts 105. The Technique of Play Production

A study of the fundamental theories of the aesthetics of the theatre and their relationship to the arts contributing to production. Students will participate in a practical programme of productions which will entail work in acting, staging, voice production, pantomime, make-up, lighting and scenic design. Two plays will be enacted and staged by the students each year. Lectures and practice. (Full course.)

Day Division: Not given 1947-48. Evening Division: Not given 1947-48.

#### Fine Arts 106. Art in Daily Living

A practical study of art, taste, and beauty as they directly affect our daily environment. An attempt is made to reach satisfying values and to attain a fundamental knowledge of the principles whereby they may be brought to realization in the planning of homes, personal costumes and accessories. Considerable discussion of town-planning and industrial design is offered at the elementary level. (Half course.)

Day Division: February to May, 1948-49 and alternate years.

Evening Division: Not given 1947-48.

# Fine Arts 107. Understanding and Appreciation of Architecture and Sculpture

A study and analysis of the development of Architecture and Sculpture. The historical periods, types, styles and techniques are explained and illustrated. To enable the student to understand and appreciate the architecture and sculpture of the world both ancient and modern and its significance, he is encouraged to become familiar with the great examples of these arts through pictorial reproductions and models.

Day Division: February to May, 1948-49 and alternate years. Evening Division: February to May, 1947-48 and alternate years.

Fine Arts 108. Studio Course in Modelling and Sculpture

For undergraduate students who wish to acquire skills in modelling and sculpture, as part of their college programme, studio work is provided. As instruction is individual, this course may be taken by advanced students as well as by those who have had no previous instruction. As Fine Arts 108a, 108b, and 108c, this course may be taken for credit each year for as many as three years. An additional tuition fee is charged undergraduates taking this course, details of which may be obtained from the Bursar. (Partial or unit course students wishing to study modelling and sculpture will register in Sir George Williams School of Art. See separate announcement.) (Half course or full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

#### Major in Fine Arts

Attention is called to the statement on majors on p. 37.

#### FRENCH

French 101. French Language and Literature

This course aims to give not merely advanced theoretical knowledge of French grammar and syntax, but actual ability in speaking and writing the language as well as a general study of the literature and history of France. As much as possible, instruction is given in French. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

French 102. Modern French Literature

(a) A more intimate acquaintance with French culture through a study of the literary thought of modern France, its origins and its nineteenth and twentieth century trends. (b) Composition: Advanced instruction in composition with the purpose of enabling the student to write the French language in a clear, correct and natural manner. Translation into French of moderately difficult English passages. Instruction will be conducted entirely in the French language. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

# French 103. A Study of French Culture

This course treats of those elements which have contributed to, and form an integral part of, that distinctive thing which is recognized as French culture. It includes a study of the social philosophy and organization of medieval and modern France and French Canada, the art, music, drama, education, general mores and folkways of the various social groups. etc. All instruction and reading given in the French language. (Full course.)

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1948-49 and alternate years.

#### French 104. French-Canadian Literature

A study of Canadian literature written in French. Books about Canada and her people from the beginning of the French regime to the present day, written by Canadians and others, in French, form the basis of this course. (For a similar and supplementary course in English, see English 109.) This course may be substituted for a half course in English in satisfying the requirements for the Bachelor of Arts degree. (Half course.)

Day Division: October to January, every year.

Evening Division: Not given 1947-48.

#### French 105. Contemporary French Literature

A study of modern French drama, poetry, novel and newspaper writing. The course provides a complete survey of French literature in the twentieth century and its influence on the trend of the modern French social, political and economic life. Special attention is given to the study of modern French literary expression in comparison with the literary expression of other countries. All instruction and reading given in the French language. (Half course.)

Day Division: Not given 1947-48.

Evening Division: October to January, 1947-48 and alternate years.

# French 106. Composition, Public Speaking and Debating in the French Language

(a) Advanced instruction in French composition and creative writing. Such instruction will be given to enable students to write the French language in a correct and literary way, using chiefly as material the subject matter of lectures. Translation into French of advanced English literary passages. (b) Extensive drill in using the French language orally to develop ability in using the language in an intelligent way as a vehicle of expression on the platform. (Half course.)

Day Division: Not given 1947-48.

Evening Division: February to May, 1947-48 and alternate years.

#### French 107. French Seminar in Oral and Written Expression

(a) Intense seminar work based on a study of the language used in contemporary French plays and novels. Analysis and discussion. (b) Discussions on the subject matter of class lectures on the trend of international political events. (c) Advanced French composition. Description, story writing, essays, criticism, newspaper editorials, etc. (Full course.)

Day Division: October to May, 1948-49 and alternate years.

Evening Division: Not given 1947-48.

### GERMAN

### German 101. Introductory Course in German Language

A beginner's course in the German language which is designed, in one year, to make the student conversant with the grammar, pronunciation and ordinary vocabulary of the language, able to read from the less difficult authors, and able to write simple essays and letters. Emphasis is placed upon learning to speak the language, as well as to read and write it. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

### German 102. German Language and Introduction to Literature

Advanced instruction in the language and an introduction to German literature. Emphasis upon idiom and usage in conversation and composition. A survey is made of the classical and modern periods in German literature and of other phases of Germanic culture. Representative readings from the works of the great writers in each period. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

### German 107. Scientific German

For students who have already taken German 101 or its equivalent. This course will deal particularly with the vocabulary and usage pertinent to the physical and social sciences, and provide further practice in written and oral expression. (Half course.)

Day Division: Not given, 1947-48. Evening Division: Not given 1947-48.

### GREEK

### Greek 101. Introductory Course in Greek

The purpose of this course is to enable a student, in one year, to gain an adequate knowledge of Greek grammar and syntax and to read simple passages of Greek quickly and accurately. (Full course.)

Day Division: October to May, every year. Evening Division: Not given 1947-48.

# Greek 102. Greek Language and Literature

The purpose of this course is to complete the study of Greek grammar and syntax begun in Greek 101, and to enable students to read with greater accuracy and understanding by a wider study of Greek authors. (Full course.)

Day Division: October to May, 1947-48 and alternate years.

Evening Division: Not given 1947-48.

### HISTORY

History 101, 103, 104, 105, 106, 107, 108, 109, 110, 111

See the Social Sciences Division.

### LATIN

Latin 101. Latin Composition and Translation

Advanced instruction in Latin prose composition and syntax with practice in sight translation. The course also includes translation and literary interpretation of prescribed selections from the Latin classics in poetry and prose. (Full course.)

Day Division: Not given 1947-48.

Evening Division: October to May, every year.

### Latin 102. Latin Literature

The purpose of this course is to provide students, interested in the subject, with a wider and deeper knowledge of the Roman people, their history, life and literature, by the reading of selected works of the best known Latin writers of the Late Roman Republic and the Early Roman Empire. (Full course.)

Day Division: Not given 1947-48. Evening Division: Not given 1947-48.

### PHILOSOPHY

Philosophy 101. Introduction to Philosophy

A study of the leading types of philosophic conception; materialism, idealism, realism, pragmatism, rationalism, empiricism, monism, dualism; and of the problems and methods of philosophy, relating them to and distinguishing them from other kinds of human interest and activity, such as science and religion. The aim of the course is to aid students in the construction of a tenable world-view for themselves. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

Philosophy 102. Great Philosophers, Ancient and Modern

This course aims to make the student conscious of his own intellectual heritage by means of a first-hand acquaintance with the thought of those philosophers, from Plato to the present day, who have been most influential in the moulding of the Western mind. It will also illuminate the character of philosophic problems by showing how they persist through a variety of forms, and are restated from age to age. Readings, lectures and discussions. (Full course.)

Day Division: October to May, 1948-49 and alternate years. Evening Division: October to May, 1948-49 and alternate years. Summer term, 1947.

Philosophy 103. Contemporary Philosophy

Philosophy 101 or 102 are pre-requisite. A critical study of contemporary tendencies in Logic, Epistemology, Theory of Value, and Metaphysics. There will be readings and class discussions in respect of such philosophers as Santayana, Russell, Whitehead, and Dewey with special reference to their outlook on scientific methodology, education, ethical and aesthetic values, political and economic problems, and the philosophy of religion. (Full course.)

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

Philosophy 106. Logic and Scientific Method

Consideration of the scope of logic, the doctrine of terms and propositions, mediate and immediate inferences and other types of argument, the nature of induction, methods of explanation, the fallacies which occur in reasoning, and the relationship of logic to philosophy and science. (Half course.)

Day Division: February to May, 1947-48 and alternate years. Evening Division: February to May, 1947-48 and alternate years.

# Philosophy 107. Philosophy of Ethics

Consideration of the problems of human conduct from the standpoint of morality, the psychology of ethics, theories of the moral standard, the objectivity of moral values, personality and freedom, rights and duties, with particular emphasis upon the social application of moral principles. (This course may be taken for credit in either the Humanities Division or the Social Sciences Division.) (Half course.)

October to January, 1947-48 and alternate years. Day Division: Evening Division: October to January, 1947-48 and alternate years.

### RUSSIAN

# Russian 101. Introduction to the Russian Language

An introduction to the Russian language, combining conversation with essential grammatical rules, selected exercises and reading material. Through this course the student is expected to gain a fair command of everyday expression, a working knowledge of grammar and a foundation for later reading of literary and commercial writing. (Full course).

Day Division: Not given 1947-48.

Evening Division: October to May, every year.

# Russian 102. Russian Language and Literature

This course presents a rapid and effective method of study for students of Russian who have mastered the main elements of grammar and pronunciation. The method involves the oral and written reproduction of model sentences and dialogues, composition, more advanced grammar and business letter writing. Included are also readings from Russian literature and prose models of great variety. In order to acquire fluency, special conversational hours are arranged. (Full course.)

Day Division: Not given, 1947-48.

Evening Division: October to May, 1947-48 and alternate years.

Summer term, 1947.

# Russian 103. Russian Translation and Interpretation

This course covers simpler phases of translation from and into the language, easy free composition, essentials of grammar and intensive training in oral expression. Pre-requisite: Russian 101 or equivalent. (Half course.)

Not given 1947-48. Day Division:

Evening Division: October to January, 1948-49 and alternate years.

### SPANISH

# Spanish 101. Introduction to the Spanish Language

A beginner's course in the Spanish language, which is designed in one year to make the student conversant with the main grammatical principles, pronunciation and ordinary vocabulary of the language. Practice is given in reading, writing and conversation, particular emphasis being placed on oral work. In the second term classes are conducted as far as possible in Spanish. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

Day Division: Not given 1947-48. Evening Division: Not given, 1947-48.

### Spanish 102. Spanish Language and Literature

In this course conversation and reading are continued and more work is offered in translation and composition. Included also are readings from Spanish literature, designed to aid in the development of effective expression in the language. As far as possible all classes are conducted in Spanish. (Full course.)

Day Division:

October to May, every year.

Evening Division: October to May, every year.

Summer term, 1947.

# Spanish 103. Latin American Culture

A survey of the culture of Latin America. Translation, composition and essaywriting of an advanced character. Ample opportunity will be given for conversational practice and self-expression in the language, to which particular importance is attached. All lectures will be conducted in Spanish. (Full course.)

Day Division:

October to May, 1947-48 and alternate years.

Evening Division: October to May, every year.

# THE SOCIAL SCIENCES DIVISION

### Social Science 101. General Course in the Social Sciences

This pandemic course has the same point of view and objectives with regard to the social sciences as Natural Science 101 has regarding the physical sciences. An attempt is made to enable the student to view contemporary society objectively by giving him ar understanding of the origins and development of modern civilization. The student is encouraged to develop his thinking about the society in which he lives and his part in that society. The subject matter of the course is drawn from selections of the classical works on man's economic and social life as well as from modern sources and includes an integration of evidence from the fields of anthropology, sociology, psychology, history, economics. political science and social philosophy. As one of the problems of contemporary society, marriage, home-making and sex education are studied. (Full course.)

Day Division: Evening Division: October to May, every year.

October to May, every year.

Summer term, 1947.

# Social Science 102. Principles of Geography

The relation of man to the various natural elements of his environment such as water, land features and climate forms the basis of this course. It is a general introduction to human geography which is cultural in scope but scientific in content. (Half course.)

### **ECONOMICS**

### Economics 101. Introduction to Economics

This course is designed to meet the needs of the general student as well as of the student who is proceeding towards a major in Economics. The course will introduce basic principles of Economic Theory in the field of exchange, production and distribution of wealth, tracing the process of price determination; the Concepts of Elasticity of Demand and Supply; various Value Schools with special emphasis on the Marginal School; Theories of production; Elementary analysis of the theory of the firm; theories of wages, profit, rent and interest; the relation between the individual firm and the whole economy; some basic concepts of Welfare Economics; an introduction to the Theory of Money and Banking; elementary treatment of international trade; business cycles; national income analysis, etc. (Undergraduates are advised to take Social Science 101 prior to or concurrently with Economics 101). (Full course.)

Day Division: October to May, every year. Evening Division: Summer Term, 1947, October to May, every year.

# Economics 102. Evolution of Modern Economic Society

This course deals with the historical development of modern industrial society out of medieval folk society. Attention is given to the various changes in agriculture, industry and commerce by which the basis for modern economic life was laid. The main emphasis is upon major trends and their causal interrelationships and the integration of social, economic, political and ideological elements. (Half course.)

Day Division: October to January, 1947-48 and alternate years. Evening Division: October to January, 1947-48 and alternate years.

### Economics 104. Economic Geography

This course deals with the way in which geographic conditions influence, and have influenced, the products, the occupations, and the ways of life of the various peoples of the world, and provides an understanding of the natural resources of the world, and the geographical factors which affect their exploitation, transportation and use in the satisfaction of wants. (Half course.)

October to January, 1948-49 and alternate years. Evening Division: October to January, 1948-49 and alternate years.

### Economics 106. International Economic Relations

This course deals with the theory of international values, the mechanism of adjustment of international balances, foreign exchange theory, the international aspects of monetary and banking theory, and tariff theory. A survey is also made, with particular reference to Canada, of the international aspects of the economic policies and activities of governments, including such topics as: commercial treaties, colonial policies, international capital investments, control of raw materials, economic factors in war and diplomacy. Pre-requisite: Economics 101. (Half course.)

February to May, 1948-49 and alternate years. Day Division: Evening Division: February to May, 1948-49 and alternate years.

Summer term, 1947.

### Economics 107. Industrial Legislation and Labour Problems

A study of legislation affecting labour and employment and of the industrial and social conditions to which such legislation applies. In particular, the course will deal with such problems as: Conditions and hours of work, wages, immigration, female and child labour, labour organizations, trade unionism, employeremployee relationships, workmen's compensation, unemployment and unemploy-

ment insurance, taxation as it affects labour, and social and industrial legislation in general. The relationship of these problems to personnel management in industry will be examined. (Full course.)

Day Division: Not given, 1947-48.

Evening Division: October to May, every year.

### Economics 108. Money and Banking

This course deals with the basic principles of Money and Banking and the role of financial institutions in the modern society; the structure of the Monetary and Banking System of Canada, Great Britain and the United States; the problems of Central Banking; International Exchange; International Credit Institutions. Particular attention is paid to monetary theory in relation to business cycle theory. Pre-requisite: Economics 101. (Full course.)

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1948-49 and alternate years.

## Economics 109. History of Economic Thought

A brief study of the development of economic thought, with special emphasis on the classical and Neo-classical period, as an introduction to modern economic theories. Pre-requisite: Economics 101 and 102. (Half course).

February to May, 1947-48 and alternate years. Day Division: Evening Division. February to May, every year.

# Economics 110. Economic History of Canada and the United States

This course aims to trace the significance of economic factors in the development of Western Civilization on North America. Emphasis is put on the process of exploration, the geographical background, territorial expansion. Problems of staple production as the fishing industry, the fur trade and its impact on the social and economic development of U.S. and Canada. The rise of the lumber industry, agricultural development, mining, pulp and paper, transportation, hydro electric power. An attempt to trace the inter-relationship between technological innovations and the business cycle in Canada. Some attention may be given to the impact of Wars on the Canadian Economy. Pre-requisite: Economics 101. (Full course).

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May 1948-49 and alternate years.

### Economics 111. Advanced course in Economic Theory

This course is designed for the student majoring in economics. It deals mainly with the theory of Price and the theory of Distribution. Here are some of the problems studied:—The theory of Demand with special emphasis on the nature, scope and application of the indifference curves; static and dynamic economics; the production function; cost analysis; pricing of productive services; the theory of imperfect competition; demand, cost and pricing of factors under imperfect competition; the theory of multiple products; the theory of capital and interest, etc. Pre-requisite: Economics 101 and 109. (Full course).

October to May, 1948-49 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

### Economics 112. Public Finance

A general study of the principles and practice of Government finance; the tax and expenditure structure of the Government will be examined. Special attention will be given to the structure and functioning of the Canadian Public Finance System. It will also include current topics, like Public debt, war finance and the aspects of Dominion Provincial relations. Pre-requisite: Economics 101. (Half

Day Division: October to May, 1948-49. Evening Division: Not given, 1947-1948.

# Economics 113. Business Cycles and Fiscal Policy

This course deals with the fluctuating trend of the modern economy. A survey of Business Cycle theories is introduced. Thorough analysis of the forces responsible for the rising significance of business fluctuation is discussed. Special emphasis on problems of measuring the cycle and business forecasting. An attempt is made to relate micro-economics (the theory of the firm) to macro-economics (problems of the economy as a whole). Particular attention is paid to Keyesian Economics and Problems of planned Economics. Pre-requisite: Economics 101, 109, 111. (Full course.)

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1948-49 and alternate years. Summer term, 1947.

# Economics 114. Economic Statistics

Pre-requisite: Mathematics 101 and 103. The purpose of the course is to introduce a more advanced scope of the statistical method with special emphasis on the application of statistics to Economic data and analysis. The relation of statistical technique to National Income analysis with special reference to the structure of the Canadian system of statistics. (Half course.)

Day Division: Not given, 1947-48. Evening Division: February to May, 1947-48.

### Major in Economics

Attention is called to the statement on Majors on p. 37.

### **EDUCATION**

# Education 101. Philosophy of Education

A seminar course for advanced students, on the philosophy of education. The development of educational theory will be studied, and particular attention will be given to the educational movements and philosophers of the twentieth century. The aim of this course will be to assist the student to develop an orientation and integration of his own education, as well as to provide a background of educational theory for those who may be preparing for professional work as social agency or Association secretaries. (Half course.)

Day Division: October to January, 1948-49 and alternate years. Evening Division: October to January, 1947-48 and alternate years.

### Education 102. Adult Education

Further study of the theory of education, with particular emphasis upon the education of adults. Attention is given to the history, principles and methods of group work and adult education, both formal and informal. (Half course.)

Day Division: February to May, 1948-49 and alternate years. Evening Division: February to May, 1947-48 and alternate years.

### Education 103. Principles of Religious Education

In this course are considered the basic concepts underlying an educational approach to religion with particular reference to the teaching of Jesus as fundamental. An attempt is made to develop the major theses of the course out of the experiences of the class members. This course and the following are suitable for teachers, Christian Association secretaries, group leaders, etc. Pre-requisite: Psychology 101 or its equivalent. (Half course.)

Day Division: October to January, 1947-48 and alternate years. Evening Division: Not given, 1947-48.

# Education 104. Curriculum and Practice in Religious Education

The major questions of method in religious education are dealt with. Contrasts between divergent theories of the curriculum are discussed as well as various aspects of character development. Types of learning and activity as related to character and personality growth are considered at length. Pre-requisite:Education 103. (Half course.)

Day Division: February to May, 1947-48 and alternate years. Evening Division: Not given 1947-48.

See also: Psychology 103, Educational and Vocational Guidance. Psychology 105, Psychology of Education.

### HISTORY

# History 101. History of Early Civilization

The story of early mankind is outlined so far as it is known at present, and the origins of the great civilizations of today in Europe, Asia, and America are studied. This survey includes the 'medieval' or transition period leading to the emergence of the economic, social, political, and religious characteristics of modern times. An introductory course. (Full course.)

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

# History 103. History of Modern Civilization

A survey of civilization from the beginnings of the modern era (about 1650 A.D.) to the present day. Emphasis is placed upon the historical background of outstanding elements and problems in the present world political, social, and economic situation. (Full course.)

Day Division: October to May, 1948-49 and alternate years. Evening Division: October to May, 1948-49 and alternate years. Summer term, 1947.

# History 104. History of Canada

An opportunity is provided in this course to study the history of Canada from the discovery of America by Europeans to the present day. Through a knowledge of the evolution of Canadian political, social and economic institutions, the student is led to analyse more adequately the present problems of the nation. Special attention is paid to the development of Quebec. (Full course.)

Day Division: Not given 1947-48. Evening Division: Not given 1947-48.

# History 105. History of the Latin American Republics

This course covers the political, social and economic history of Mexico, the West Indies, and all countries in South America. The development of each is studied, with special reference to their interdependence. The growth of Pan-Americanism is traced, and the implications and potentialities of this movement for the United States of America and for Canada are analysed. (Half course.)

Day Division: Not given, 1947-48.

Evening Division: October to January, 1947-48 and alternate years.

# History 106. History of the United States of America

An introductory course dealing mainly with the period since the American Civil War. The character of the population, the government, and the various voluntary political and labor organizations are studied from an historical point of view. Special attention is paid to the development of the United States in the Pacific and to the background of the conflict with Japan. (Half course).

Day Division: October to January, 1948-49 and alternate years. Evening Division: October to January, 1948-49 and alternate years.

# History 107. History of Social and Political Ideas

A study of the origins and development of the social and political ideas which are current in the world today. The historical approach is used to provide a sound basis for the understanding of contemporary ideologies, particularly democracy, communism and fascism. Students are required to complete a course in European history before taking this course. (Half course.)

Day Division: February to May, 1947-48 and alternate years. Evening Division: February to May, 1947-48 and alternate years.

# History 108. Development of the British Commonwealth of Nations

A survey of British imperial history from Tudor times to the present. The rise of the Commonwealth idea is traced, along with the history of Ireland and India. An attempt is made to understand the position of the Empire and Commonwealth in the world to-day, and their probable role in the future. (Half course.)

Day Division: February to May, 1948-49 and alternate years. Evening Division: February to May, 1948-49 and alternate years.

# History 109. History of French Canada

A study of Canada under the French Regime, and of Quebec during the British period. An opportunity is provided in this course to survey the history of the French Canadians from the first settlement on the St. Lawrence to the present day, and also of the English speaking minority in the Province during the years since the conquest of 1760. (Full course.)

Day Division: October to May, 1948-49 and alternate years. Evening Division: October to May, 1948-49 and alternate years.

# History 110. Canada Since 1791.

This course is a study of the growth of the Canadian nation from a knowledge of the evolution of Canadian institutions the student is led to analyse more adequately the present problems of the nation. While the political thread will run throughout, economic and cultural factors will be discussed. The significance of sectionalism, imperialism, and nationalism will be examined. (Full course.)

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

# History 111. History of Russia

This course traces the origin of the Slavic speaking peoples in Europe and the emergence of the Russian Empire. It discusses the ideology and history of bolshevism, and the period of communism and nationalism in the U.S.S.R. and among the Slavic peoples since the First World War. (Half course.)

Day Division: October to January, 1947-48 and alternate years. Evening Division: October to January, 1947-48 and alternate years.

### Major in History

Attention is called to the statement on majors on p. 38.

### POLITICAL SCIENCE

### Political Science 101. Introduction to Political Science

A study of the origin and nature of the State, and the relation of the individual to it. The course will deal with the nature and interpretation of law, constitutions, division of powers of government, organization of political parties, formation of public opinion, the function of Parliaments, the different types of cabinet systems, the problems of municipal government, associations of states, Nationalism, and Imperialism, and the causes of international conflict. An inquiry will be made into the nature of Democracy both as a form of government and a way of life and the challenge it must be prepared to meet in the rival ideologies of Naziism Communism and Fascism. (Full course).

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

### Political Science 102. International Political Relations

This course will deal with such topics as: the rise of the Western state system; national sovereignty and international law; balance of power, diplomacy, nationalism and imperialism, the settlement of international disputes, public international organizations, patriotism, the politics of power, war and peace. Through lectures and class discussions the student will gain some knowledge of the complex pattern of international relations which will serve as a basis for evaluating current events in modern society. Pre-requisite: Political Science 101. (Half course.)

Day Division: February to May, 1948-49 and alternate years. Evening Division: February to May, 1947-48 and alternate years.

### Political Science 103. Elements of Law

An introduction to law as it affects the ordinary citizen. A general survey of the growth and primary principles of civil, criminal and international law, together with a study of the concepts of human justice and social responsibility. (For commercial law, see Commerce 106-108.) (Half course.)

Day Division: October to January, 1947-48 and alternate years. Evening Division: October to January, 1948-49 and alternate years.

### Political Science 104. Problems of Public Administration

A study of the practical problems and methods of government approached from the point of view of the citizen and the voter. While particular attention is paid to local civic government, the course includes a study of the details of provincial and federal administration and public finance. The relationship of the routine of public administration to political and social theory is also discussed. (Half course.)

Day Division: February to May, 1947-48 and alternate years. Evening Division: Not given 1947-48.

### Political Science 105. Political Theories, Ancient and Modern

A critical study and analysis of the great thinkers on the problems of politics; Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau, Hegel, Marx, Mill, etc. This course is designed to give a survey of systematic political reasoning from the classical period up to the present time in an endeavour to show the foundations of modern political thought. Pre-requisite: Political Science 101. (Full course.)

Day Division: October to May, 1948-49 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

### Political Science 106. Government and Politics of Canada.

A study of the British North America Act and its judicial interpretation; the nature of Canadian federalism; the parliamentary system; nature and organization of political parties; provincial and municipal governments; law and the courts; foreign policy. (Half course.)

October to January, 1947-48 and alternate years. Evening Division: October to January, 1948-49 and alternate years.

See also: History 107, History of Social and Political Ideas, and Economics 112, Public Finance.

# Major in Political Science

Attention is called to the statement on majors on p. 37.

### **PSYCHOLOGY**

For regularly enrolled undergraduates psychology is a second year subject to be preceded by Natural Science 101, Social Science 101 or Biology 101. Partial students may be admitted by special permission.

# Psychology 101. A General Study of Mind and Behaviour

The purpose of this course is the development of an adequate understanding of human behaviour and experience. The work includes a study of the sense organs and nervous system, perception, learning, memory, motivation and the basic urges, emotional reactions, personality development, adjustment and integration, abnormal personality, mental abilities and aptitudes, and the application of psychological findings to the problems and activities of everyday life. This course is pre-requisite to all other courses in psychology listed below. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

Summer term, 1947.

# Psychology 102. Advanced General Psychology

This course makes a more detailed study of general, physiological and individual psychology. The work includes an outline of the history of modern psychology since Descartes, the various schools of psychological thought and their historical background, psychoanalysis, and individual differences, normal and abnormal. (Full course)

October to May, 1948-49 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

# Psychology 103. Educational and Vocational Guidance

A course in the theory, principles and practice of scientific guidance in education and in industry. Detailed study and practical work in the techniques of analysing abilities, aptitudes, traits and interests, and in the methods of personality adjustment, self-discovery, orientation and re-education of the whole person, which are the heart of the guidance process. (Full course.)

Day Division: Not given 1947-48.

Evening Division: October to May, 1947-48.

# Psychology 104. Psychology in Industry and Commerce

A specialized course in the psychology of business and industry, and the application of its principles to such matters as: efficiency, employee selection and placement, personnel policy and problems, advertising, public relations, personal adjustment, etc. (Half course.)

Day Division: Not given 1947-48.

SIR GEORGE WILLIAMS COLLEGE

Evening Division: October to January, 1947-48.

# Psychology 105. Psychology of Education

A seminar course for advanced students, on the psychology of education, both formal and informal. In this course students will consider not only the teaching of skills and information, but also the broader problems of education as the full growth and adjustment of persons in society. (Half course.)

Day Division: February to May, 1948-49 and alternate years.

Evening Division: February to May, 1947-48.

# Psychology 106. Social Psychology

A study of the individual in his socio-psychological environment, the cultural and hereditary determinants of behaviour, the uniformities and variations among human beings, sex and race differences as determined by cultural patterns, social interaction, attitudes, stereotypes, propaganda, and race prejudice, public opinion, and morale. (Half course.)

Day Division: October to January, 1947-48 and alternate years. Evening Division: October to January, 1948-49 and alternate years.

# Psychology 107. Personality and Mental Hygiene

The course deals with the nature of personality, the correlation of mental characteristics with physical traits, bodily form and expressive movements, the analysis of intellect, temperament and character, the integration and development of personality and its relation to the patterns of culture, the problem of types, adjustment and resolution of conflict, personality tests, rating scales and inventories. (Half course.)

Day Division: February to May, 1947-48 and alternate years. Evening Division: February to May, 1948-49 and alternate years.

# Psychology 108. Psychology and Crime

A specialized course in the application of psychology to problems of legal procedure, crime and punishment. The course includes the study of the psychology of the judge, the jury, the witness, the police and the criminal. Discussion of the social and psychological factors contributing to crime and delinquency, and consideration of the various penal methods also is included. (Half course.)

Day Division: October to January, 1947-48 and alternate years. Evening Division: October to January, 1948-49 and alternate years.

# Psychology 109. Comparative Psychology

The comparative method in the study of psychological problems, the evolution of behavior and its mechanism from protozoa to man, the development of mind and behavior in the individual, discussions of tropisms, reflexes, instincts, needs, sensory capacities, learning, thinking, feeling, and some mysterious powers of animals and man. (Half Course)

Day Division: February to May, 1947-48 and alternate years. Evening Division: February to May, 1948-49 and alternate years.

# Major in Psychology

Attention is called to the statement on majors on p. 39.

### SOCIOLOGY

# Sociology 102. Introductory Sociology

The student is introduced to objective studies of social forms and processes in human societies. The purpose of this course is to develop an understanding of collective human behaviour, particularly an understanding of those institutions which give permanence to modern social structures, and to make the student thoroughly familiar with the terminology of modern sociological science. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year.

# Sociology 103. Social Disorganization and Social Therapy

This course examines the nature of social disorganization, studies its causes, and its effects upon personal, family, and community behaviour. A survey is made of the work and function of social welfare organizations designed to correct conditions of individual and social maladjustment. (Full course.)

Day Division: October to May, 1947-48 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

# Sociology 104. General Anthropology

The evolution of man and his culture to the historical era; the differentiation of races and the problem of race superiority; general principles of cultural anthropology; the origin and development of social, economic and political institutions; marriage, the family, religion, art, science, and other problems of culture. (This course may be taken for credit either as a Social Science or as a Natural Science.) (Half course.)

Day Division: October to January, 1948-49 and alternate years. Evening Division: October to January, 1947-48 and alternate years.

# Sociology 105. Social Movements and Institutions.

The first half of this course outlines the nature and functions of social movements in general, and analyses the characteristics of some of the movements which are part of modern society. The second half of the course deals with the nature and functions of movements which have developed into institutions. Special attention is paid to forms of collective action which evolve to meet the particular problems and needs of urban communities. (Full course.)

Day Division: October to May, 1948-49 and alternate years. Evening Division: October to May, 1947-48 and alternate years.

# Sociology 106. The Modern Community

In this course students study the patterns and processes of regional organization, with special attention paid to the ecological patterning of modern urban areas. Conflict, competition, and various forms of adjustment, co-operation, and control are social processes studied with reference to the physical and social characteristics of urban communities. (Half course.)

Day Division: October to January, 1947-48. Evening Division: October to January, 1948-49.

# Sociology 107. The Family

This course aims to study the family in primitive and historic society. A study is made of the effects of the industrial revolution in relation to the evolution of the modern family, the dominant trends in the forms and functions of the modern family, comparative analyses of trends in various countries, urban-rural comparison, problems of the modern family (desertion, divorce, separations), forms of marriage, and probable direction of changes in the family of the future. (Half course.)

Day Division: February to May, 1947-48. Evening Division: February to May, 1948-49.

# Sociology 108. Character Building Agencies and Group Work

A series of three courses (Sociology 108a, 108b and 108c) in the practical aspects of the work of the Christian associations and allied institutions. Such topics as leadership training, boys' clubs, principles of group work, physical education, camping, business administration and work with military forces, are dealt with. An attempt is made to make these courses as practical as possible by use of the resources of the Y.M.C.A. and other agencies in Montreal. These three courses are given in rotation, one each year, so that an individual may take them all in any three-year period. They should be taken by undergraduates only in conjunction with other courses in the social sciences and are required in order to qualify for the Diploma in Association Science. (Half course.)

Day Division: Sociology 108a—October to May, 1947-48 and every third year.

Sociology 108b—October to May, 1948-49 and every third year.

Sociology 108c—October to May, 1949-50 and every third year.

Evening Division: Not given 1947-48.

See also: Psychology 106, Social Psychology.
Psychology 108, Psychology and Crime.

# Sociology 109. The American Indian

The advent of man to America; early cultural developments and the differentiation of the various groups or tribes; the culture of the Mayas, Toltecs, Aztecs, Pueblos, Iroquois, Eskimos, Northwest coast tribes, Andean and other early civilizations of North and South America; the cultural contributions of the Indian to the white man's civilization. (Half course.)

Day Division: February to May, 1948-49 and alternate years. Evening Division: February to May, 1947-48 and alternate years.

### Major in Sociology

Attention is called to the statement on majors on p. 39.

# COMMERCE DIVISION ACCOUNTANCY

# Accountancy 101. Elementary Accountancy.

An introductory course in accountancy in which are presented the fundamental principles of the subject with particular emphasis upon the application of those principles through modern bookkeeping procedure. It includes: Double entry bookkeeping, origin, records maintained, statements produced and composition; purchases and sales transactions, instalments, voucher register system; cash and bank transactions, reconciliations; accounts and bills payable and receivable; ledgers, general and subsidiary, controlling accounts; trial balance, adjustments and closing entries; salary and wage records; accrued and deferred income and expenses; profits determination; departmental accounting; consignments; partnerships; and business documents. Accounts of corporations: Organization, capital and operation, acquisition of private business, balance sheet, financial trading, industrial, legal requirements, form and content; trading and profit and loss statements, form and content; Progressive realization and distribution, sale of business to limited liability company. Lectures and practice. An extra \$10.00 fee is charged to cover the extra time given in this course. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

# Accountancy 102. Intermediate Accountancy

An advanced course in Accountancy for students who have completed Accountacy 101 or its equivalent. Topics included are the preparation and use of working papers, closing entries, and the preparation of financial statements as to form and content, from both double and single entry books; corporations—organization, capital structure and accounting for assets, liabilities and items of revenue and expense; the use of comparative statements, ratios, and source and application of funds statement; bond issues and redemption, sinking and other funds and reserves; and corporation income tax. Lectures and practice. An extra \$10.00 fee is charged to cover the extra time given in this course. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

# Accountancy 103. Cost Accounting

An advanced course in accountancy for students who have completed Accountancy 101 or the equivalent. It is desirable that Accountancy 102 be taken previously or concurrently. Designed to provide the student with a working knowledge of cost analysis, it covers the procedure required in accounting for material, labor, and manufacturing expense costs and includes a comprehensive outline of specific order, estimating, process and standard cost systems together with a discussion of elements of cost, relation of cost records to general accounts, and of cost statements to general statements. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every term. Summer term, 1947.

# Accountancy 104. Auditing and Investigation

A course on the principles underlying the practice of auditing, including the purposes and advantages of an audit, types of audits and examinations, qualifications of an auditor, preparatory considerations, the use of working papers and audit programmes, systems of internal check, the audit of asset, liability, revenue and expense accounts and of business transactions generally, forms of fraud and its detection, the legal duties and responsibilities of auditors, and auditors' reports and certificates; investigations types, procedures and reports. Particular attention

is paid in this course to the requirements for the Intermediate Auditing examinations of the Institute of Chartered Accountants of Quebec. Pre-requisite: Accountancy 102 or equivalent. (Full course.)

Day Division: Not given, 1947-48.
Evening Division: October to May, every year.
Summer term, 1947.

# Accountancy 105. Higher Accountancy

SIR GEORGE WILLIAMS COLLEGE

A course in the principles of partnership and joint venture accounting; bank-ruptcy, trusteeship, receivership and estates; agencies and branches; mergers and consolidations; foreign exchange; the accounts of municipal corporations and institutions. It includes the preparation of statements on partnership dissolution and liquidation, the statement of affairs and deficiency account, receiver's and trustee's accounts, the realization and liquidation account, the consolidated balance sheet and surplus account. Particular attention is paid in this course to the requirements for the Intermediate Accounting examinations of the Institute of Chartered Accountants of Quebec. Pre-requisite: Accountancy 102. (Full course.)

Day Division: Not given, 1947-48.
Evening Division: October to May, every year.
Summer term, 1947.

### COMMERCE

### Commerce 105. A General Course in Commerce

A course in the science of business organization and management designed to serve as an introduction to the various phases of commerce. Topics included: Origin, growth and classification of business organizations, types of securities, costing, marketing, advertising, plant location, production control, purchasing, wage systems and labour relations, transportation, managerial interpretation and use of financial statements and statistics, government regulations affecting business. It is recommended that this course be taken after or with Accountancy 101. (Full course.)

Day Division: October to May, every year. Evening Division: October to May, every year. Summer term, 1947.

### Commerce 106. Commercial Law

A general survey of the law relating to business and commerce, including study of the law of obligations with special reference to contracts in general; lease and hire and the rights and obligations of landlords and tenants; forms of sale and the duties and liabilities of vendor and purchaser; wills and successions; mandate or agency; forms of partnership and the rights and obligations of partners; loans; civil procedure. Reference is made in all cases to the law of the Province of Ouebec. (Half course.)

Day Division: October to January, every year. Evening Division: October to January, every year. Summer term, 1947.

### Commerce 107. Advertising

This course explains the basic principles involved in creating advertisements and in carrying on complete advertising campaigns. Stress is placed upon the actual writing of copy and designing of lay-outs for various advertising media, an understanding of the processes of photo-engraving, the appreciation of advertising art, and a basic knowledge of advertising agency practice. (Half course.)

Day Division: October to January, 1947-48, and alternate years.

Evening Division: October to January, every year.

### Commerce 108. Commercial Law (Advanced)

This course continues the survey commenced in Commerce 106, dealing with (a) Bills of exchange—negotiable instruments, particularly cheques, promissory notes and drafts, (b) Corporations—the Dominion and Quebec Companies Acts are compared and applied to various companies. Companies are traced from their inception to final production, and the duties of the various members are examined in detail, (c) Insurance—a study of the law regarding the operation of the various insurance companies in the Province of Quebec, the various forms of insurance and the rights and obligations of the parties thereto, (d) A working knowledge of the Bankruptcy Act, the Bank Act and the Income Tax Act, (e) Carriers and transportation, (f) Copyright, patents and trade marks. (Half course.)

Day Division: February to May, every year. Evening Division: February to May, every year. Summer term, 1947.

# Commerce 109. Transportation and Traffic

Following a brief general study of the economics and history of transportation this course will deal with the details of transportation and traffic management in Canada, including: types of transportation service, rates and classifications, regional traffic problems and their relation to economic geography, shipping principles and routine, etc. (Half course.)

Day Division: Not given 1947-48.

Evening Division: October to January, 1947-48 and alternate years.

### Commerce 110. Marketing and Merchandising

A general study of modern methods of wholesale and retail distribution, sales organization and promotion, price policies and economic value, market analysis and advertising, purchasing, the relation of these to production. (Half course.)

Day Division: Not given 1947-48.

Evening Division: February to May, 1947-48 and alternate years.

# Commerce 111. Advertising (Advanced)

This course is open to students who have completed the course Commerce 107 or have an equivalent working knowledge of the theory and practice of advertising. Topics treated include: advanced study of the construction and styles of advertising copy; direct mail advertising; direct mail copy; format, lay-out and printing of mailing pieces; organization and execution of direct mail campaigns; house organs. Lectures, discussion, assignments, and criticism by the instructor. (Half course.)

Day Division: February to May, 1947-48 and alternate years.

Evening Division: February to May, every year.

# Commerce 113. Company Secretarial Practice

Duties of the secretary of a limited company, including his statutory duties under the companies' acts, books and records to be kept, business problems to be faced, issuance of shares, and payment of dividends, preparation of governmental reports, and meetings of directors and shareholders. (Half course.)

Day Division: February to May, every year. Evening Division: February to May, every year.

### Commerce 114A. Credits.

This is a practical course covering the subject of credits and designed to help students of the Canadian Credit Institute. It covers; duties and qualifications of a credit man; credit and its place in the business structure; credit instruments; sources of credit information; analysis of the credit risk; credit records; and types of credit. (Half course.)

Day Division: October to January, every year. Evening Division: October to January, every year.

### Commerce 114B. Collections.

This is a practical course covering the subject of collections and designed to help students of the Canadian Credit Institute. It covers: collection follow-up systems; bad debt analysis; credit frauds; locating debtors; collection policies; and aws affecting collections including guarantee and suretyship, sale of goods, interest, limitations of actions with prescription, bankruptcy and insolvency, conditional sales agreements and repossessions. (Half course.)

Day Division: February to May, every year. Evening Division: February to May, every year.

# Commerce 115. Investment Analysis

The theory of investment from the standpoint of the investor. Includes treatment of investment objectives, investment institutions, evaluation of sources of information and counsel, media of investment, methods of analyzing risks and returns, and the formulation of appropriate investment policies for individuals and institutions. Commerce 116 is a pre-requisite. (Half course.)

Day Division: February to May, every year. Evening Division: February to May, every year.

### Commerce 116. Corporation Finance

A practical course dealing with corporation securities and finance. A study is made of various classes of stocks and bonds, of stock warrants and rights, of dividend and interest payments, of capital structures and security underwriting. Actual examples taken from Canadian corporation history are used to illustrate various points and well known financial reference services available in Canada are used in connection with this course. (Half course.)

Day Division: October to January, every year. Evening Division: October to January, every year.

### Commerce 117. Insurance

After a brief review of the history and problems of insurance this course deals with various types of insurance organizations, the principles of reserves, premiums and investments; policies, policy loans and surrender values; the mortality table. The treatment is both descriptive and mathematical. While the emphasis is on life insurance, other types of risk and risk-bearing are dealt with briefly. (Half course.)

Day Division: Not given 1947-48.

Evening Division: February to May, every year.

### Commerce 118. Purchasing

A course in the practical problems of purchasing and the purchasing agent in business and industry. Programme of lectures, readings, reports and investigations, planned with the cooperation and assistance of the Purchasing Agents Association of Montreal. (Half course.)

Day Division: Not given 1947-48.

Evening Division: October to January, every year.

### Commerce 119. Taxation

This course is devised to give authentic and up-to-date information on one of the major factors in business today. Discussion of problems is encouraged. Topics covered include: Corporation and Personal Income Taxes, sales taxes, succession duties, and other levies. (Half course.)

Day Division: Not given 1947-48. Evening Division: Not given 1947-48.

Commerce 121. Stenography

A course in shorthand writing, using the Pitman system, designed, in two years, to enable the student to take dictation quickly and accurately and to transcribe it efficiently. The course is divided into two parts: Commerce 121a, Shorthand Theory, and Commerce 121b, Stenographic Practice and Transcription, one part to be taken in each of the two years. For credit for second half course the student must pass a standard test at 80 words per minute. (This course is open only to undergraduates in the College. Other students wishing to follow similar studies will register in Sir George Williams Business School. See separate announcement.) (Half course, each part.)

Day Division: October to May, every year. Evening Division: October to May, every year.

Commerce 122. Typewriting

A course in touch typewriting which may be taken alone, or coordinated with Commerce 121, Stenography. This course is designed, in two years, to enable the student to understand the most common makes of typewriters and to operate them accurately, quickly and efficiently. The course is divided into two parts: Commerce 122a, Typewriting Method, and Commerce 122b, Typewriting Practice and Speed, one part to be taken in each of the two years. For credit for second half course the student must pass a standard test at 50 words per minute. (This course is open only to undergraduates in the College. Other students wishing to follow similar studies will register in Sir George Williams Business School. See separate announcement.) (Half course, each part.)

Day Division: October to May, every year.

Evening Division: October to May, every year.

Commerce 123. Office Management

A course in the principles of office management, including such topics as: The function of the office in business; organization and principles of control; office systems and routines; office equipment and labour-saving devices; office planning and layouts; selection and training of office personnel; office communications. (Half course.)

Not given 1947-48. Day Division:

Evening Division: February to May, every year.

Commerce 124. Commercial Correspondence

Advanced instruction is given in commercial correspondence, with particular emphasis on the requirements of the General Accountants Association. Actual emphasis on the requirements of the General Accountants Association. Actual practice and constructive criticism are included. Types of letters covered include applications for positions, inquiries and orders, adjustments and complaints, collections, and sales. Students are coached, also, on the techniques of dictation and are given opportunities for practice. (Half course.)

Day Division: October to January, every year.

Evening Division: October to January, every year.

Commerce 125. Supervisory Training

The course deals with three supervisory skills: 1. Skill in Instructing, essential to convey knowledge possessed, and to delegate work; 2. Skill in Planning and convey knowledge possessed, and to delegate work; 2. Skill in Flanning and Improving Methods, vital if satisfactory results are to be achieved by both the supervisor and those he guides; and 3. Skill in Leading and Working with People to maintain the co-operation and teamwork of staff. The course is based upon an adaptation of the United States Training-Within-Industry program which covers Job Instruction Training, Job Methods Training and Job Relations Training, sometimes referred to as the "J" series. Sessions are limited to a group of twelve persons. Those in managerial positions who are considering the introduction of these courses to their own enterprises should apply for admission to Evecutive of these courses to their own enterprises should apply for admission to Executive Training 101. (Half course.)

October to January, every year. Day Division: Evening Division: October to January, every year. Summer term, 1947.

# Commerce 126. Job Analysis and Evaluation

This course deals with the practical aspects of introducing and operating a Job Analysis and Evaluation system for a representative enterprise. The course is planned to help students prepare a programme suited to the needs of their own employees. (Half course.)

Day Division: Not given 1947-48.

Evening Division: February to May, every year.

### Commerce 127. International Trade

The course deals with the fundamental and practical aspects of importing and exporting, covering such subjects as: general characteristics of international trade; trade terms and definitions; governmental services available; import and export regulations; export credit insurance; customs regulations, duty drawbacks, export taxes, and the functions of a licensed customs broker; trading controls and licensing of other countries; trading documents; forwarding; warehousing, packing and shipping, marine insurance; financing foreign trade; health and welfare regulations and other requirements relating to such matters as labelling and packaging. Lectures will be delivered by a variety of specialists following a programme developed in co-operation with the International Trade Section of the Montreal Board of Trade. (Half course.)

Day Division: Not given 1947-48.

Evening Division: October to January, 1947-48 and alternate years.

### **EXECUTIVE TRAINING**

# Executive Training 101. Executive Skills

This course deals with three basic executive skills, primarily from an office management point of view: 1. Skill in Instructing, which is essential if one is to be able to convey knowledge possessed, and delegate office work to others with confidence that it will be done as required; 2. Skill in Planning and Improving Methods, which is vital if satisfactory results are to be achieved from energy expended, by both the executive and those he guides; and 3. Skill in Leading and Working with People, which is very important, for unless a person can obtain and maintain the co-operation and teamwork of his staff, and work harmoniously with those around, he can hardly claim to be an executive. The course is based upon a clerical adaptation of the Instruction Training, Methods Training, and Relations Training Series of the United States Training-Within-Industry. Not only does it cover the three basic executive skills mentioned, but also presents a practical plan of application and follow-through in a representative office. A definite technique for manual or procedure writing is also presented for the consideration of the group. Registration for the course is limited to ten persons, all of whom must be in managerial positions where they can put to immediate practical use the principles discussed. The College reserves the right to select from those applying for registration the ten who appear to be most likely to benefit from the course from the point of view of being able to make prompt practical use of the executive techniques recommended. Those who are not in a position to fulfil the above requirements should apply for admission to Commerce 125. (Half course.)

Day Division: October to January, every year.

Evening Division: Not given 1947-48.

### MATHEMATICS

# Mathematics 101C. Business Arithmetic and Algebra

This course is designed to review business arithmetic and elementary algebra, and to provide the necessary training pre-requisite to Mathematics 102. It includes a review of decimals, addition, subtraction, multiplication, division, percentages, and a discussion of short methods of calculation; together with a review of logarithms and series. It also covers ratio, proportion, variation, arithmetic harmonic, and geometric progressions, theory of quadratics, permutations and combinations, the binomial theorem and graphical algebra. Students contemplating advanced studies in the field of mathematics or commerce should take Mathematics 101 in preference to this course. (Half course.)

Day Division: Not given 1947-48.

Evening Division: October to January, every year.

# Mathematics 102. Mathematics of Finance

An introduction to the theory of interest and bond values. The course is designed to acquaint the student with those commercial problems involving compound interest and covers annuities (ordinary, certain and deferred), amortization and sinking fund factors, depreciation, etc., and bond values. *Note:* either Mathematics 101 (Algebra), Mathematics 101C, Algebra 55, or Intermediate High School Algebra, is pre-requisite to this course. (Half course).

Day Division: February to May, every year. Evening Division: February to May, every year.

Summer term, 1947.

# Mathematics 103. Statistical and Graphical Methods

The elementary principles of statistical method as applied in the scientific study and interpretation of economic and social phenomena. The course includes the study of averages, percentiles, measures of dispersion and central tendency, tabulation, frequency distribution, frequency curves, correlation, index numbers, graphical representation and classification, etc. (Half course.)

Day Division: October to January, every year. Evening Division: October to January, every year.

Summer term, 1947.

	1 age
Academic year and class hours	22
Accountancy	43, 84
Administration, Unicers of	6
Admission, application form	cover
Admission to the College	19
Adult Education	76
Advanced standing, Application for	21
Advancement and examinations	23
Advertising	85, 86
Aims of the College Announcements published by the College	14
Anthropology	Back 82
Art.	67 68
Art	34
Arts, Curriculum for diploma of Associate in Arts.	39
Associate diploma	13 30
Association of Alumni Association Science, Diploma in	17
Association Science, Diploma in	42, 83
Astronomy	49
Athletics	spec 17
	care.
Bachelor's degree	13, 34
Bible, the English	-
Biology	65
Bookstore	50
Business Secretary	27 44, 46
Manual Decreases and a grant of the second o	44, 40
Calendar	4, 5
Captain's Chapel.	18
Certificate of Credit	13
Certificates, diplomas and degrees	13
Certined General Accountant	44
Chapel	18
Chartered Accountant	44
Chemistry	52
Classification of Students	19
Co-education	14
Commerce Courses	84
Commerce, Curriculum for degree of Bachelor of Science (Commerce)	35
Commerce, Curriculum for diploma of Associate in Commerce	40
Commercial law	85, 86
Contents, Table of	3
Courses, extra	26
Courses of study	46 48
Curricula:	40
Associate in Arts	39
Associate in Commerce	40
Associate in Science	40
Bachelor of Arts	34
Bachelor of Science	34
Bachelor of Science (Commerce)	35
Special programmes of study	41
	Harates 17
Deferred payments	28
Degree of Bachelor	13, 34
Degrees, diplomas and certificates	13
Dentistry, preparation for	43

	Page
Diplomas of Associate	13, 39
Diplomas of Associate	3, 42, 83
Dislamon dogrees and certificates	13
Dissistence of the College	33
Duama Courses	67
Decumphting	
Decreing mechanical	- 00
Drawing and painting	67
	50
Ecology	74
E-amamaian	
Engineering matriculation	62
EnglishEnrollment	13, 26
Enrollment.  Entrance requirements.	. 19
E	
E-rening division	. 10
Einsting and advancement	. 20
Emparative Proping	. 07
Extra courses	. 20
Extra-curricular activities	. 16
Date Carried and Assessment and Asse	
The second secon	. 17
Facilities of the College	
Faculty Council	
Finance, Public	75
First and second week courses	. TU
Emanda	
keench-Canadian Life and Leffers	
French-Canadian Literature	69
Gemmology	. 50
General Accountants Association.	. 44
Company statement	10
C	
Commonder	
Calama	
0	
Communication Decord of	
Grading system	23
Grading system.  Graduate faculties and university professional schools, Recommendation	1 to 41 70
Carala	
Guidance, Student	19
Gymnasium	
Health Programme	17
High School Sir I porte Williams	
TT* 11 -1 -4-4	
TT:	
TI	
Humanities division	33, 62
Instruction, Officers of	7
Instruction, Officers of	
Inchrance	Control of the Contro

	Page
Laboratories	17, 18
Latin	71
Law, Commercial	85, 86
Law, Commercial. Law (Industrial Legislation), see Economics.	74
Law, see Folitical Science	79
Legal secretary	46
Length of courses	16
Librarians	12
Library	18
Majors	36
Mathematics	56, 90
Matriculation into the College	19
Watriculation, Senior	41
Mechanical drawing	55
Medical secretary	46
Medicine, preparation for entrance to	42
Modelling and Sculpture	68
Music	16, 67
N. 10:	
Natural Science, general course	49
Natural Sciences division	33, 49
Office of the College	27
Outlines of subjects	48, 90
	- Allenda
Painting and drawing	67
Partial course students	, 19, 20
Payments	28
Philosophy	71
Physics	59
Physiology	51
Political Science.	79
Practical engineers, Courses for	43
Prizes and scholarships.	25
Professional schools and graduate faculties, Recommendation to	41
Psychology . Public Administration .	80
Publications of the College	79
Public Finance	Back
Public speaking.	75 65
Purchasing	87
	01
Radio	59, 60
Radio	39, 00
Registration	26
Registration.  Rehabilitation benefits for returned men.	30
Religious education	76
Residence	19
Russian	72
Scholarships and prizes. Science, Curriculum for degree of Bachelor of Science.	25
Science, Curriculum for degree of Bachelor of Science.	34
Science, Curriculum for diploma of Associate in Science	40
Sculpture	68
Secretarial training	44
Selection of courses	46, 47
Senior matriculation.	41

	Pa	ge
Sir George Williams High School Social Science, general course. Social Sciences division. Sociology.	33,	82
Spanish Special programmes of study Statistical and graphical method	57,	88
Student guidance	48,	22
Supplemental examinations. Swimming Pool. Taxation.		24 19 87
Textiles. Timetables of instruction. Typewriting.	43,	61 22 88
Withdrawal and refund		29 14
Y.M.C.A. Secretaryship training	, 42,	83
Zoology		51

# Announcements of Sir George Williams College and the Sir George Williams Schools which may be obtained from the Registrar.

Sir George Williams College (Faculty of Arts, Science and Commerce), day and evening divisions.

Sir George Williams High School, evening division only.

Sir George Williams Elementary School, evening division only.

Sir George Williams Business School, day and evening divisions.

Sir George Williams School of Art, day and evening divisions.

The Summer Term at Sir George Williams.

The Training of Y.M.C.A. Secretaries.

SCHOLARSHIPS, College and High School.